THE REPORT

OF THE

PRESIDENT

OF

QUEEN'S COLLEGE, GALWAY,

FOR

THE SESSIONS 1870-71, 1871-72.

Presented to both Houses of Parliament by Command of Her Majesty.

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THE REPORT

OF THE

PRESIDENT OF QUEEN'S COLLEGE, GALWAY,

FOR

THE SESSIONS 1870-71, AND 1871-72.

TO THE QUEEN'S MOST EXCELLENT MAJESTY.

MAY IT PLEASE YOUR MAJESTY,

IN tables I. and II. will be found a statement of the numbers and religious persuasions of the Students who have entered this College and attended the Lectures therein during every Session since its opening.

I.—NUMBERS and RELIGIOUS PERSUASIONS of STUDENTS who have entered the Queen's College, Galway, in each year from its opening.

Session.	Matriculated Students.	Non-Matriculated Students.	Total.	Members of Established Church.	Roman Catholics.	Presbyterians.	Wesleyan Methodists.	Independents.	Various.	Total.
1849–50, . .	64	4	68	24	38	6	–	–	–	68
1850–51, . .	23	3	26	10	9	7	–	–	–	26
1851–52, . .	31	5	36	13	21	2	–	–	–	36
1852–53, . .	21	2	23	8	12	3	–	–	–	23
1853–54, . .	25	5	30	12	15	3	–	–	–	40
1854–55, . .	26	15	41	18	18	3	2	–	–	31
1855–56, . .	32	7	39	14	15	8	1	1	–	49
1856–57, . .	35	8	43	15	22	3	1	1	1	43
1857–58, . .	36	7	43	16	17	9	–	1	–	43
1858–59, . .	44	4	48	20	19	7	2	–	–	48
1859–60, . .	35	5	40	12	25	1	–	1	1	60
1860–61, . .	*59	1	60	13	33	12	2	–	–	60
1861–62, . .	†59	3	62	21	35	6	–	–	–	62
1862–63, . .	60	4	64	13	27	16	1	–	2	54
1863–64, . .	54	5	59	20	21	11	2	4	1	70
1864–65, . .	58	12	70	26	28	13	–	2	1	39
1865–66, . .	46	3	49	16	19	10	3	–	1	49
1866–67, . .	42	2	44	14	18	7	3	2	–	44
1867–68, . .	†44	3	47	14	20	11	2	–	–	47
1868–69, . .	‡56	4	60	20	24	15	1	–	–	60
1869–70, . .	49	5	54	20	25	6	2	–	1	54
1870–71, . .	52	6	58	22	23	12	–	1	–	58
1871–72, . .	§64	1	65	19	31	11	3	1	–	65
Total, . .	1,015	114	1,129	385	515	182	25	14	8	1,129

* Including three who had previously been in attendance as non-matriculated students.
† Including one who had previously been in attendance as a non-matriculated student.
‡ Including two who had previously been in attendance as non-matriculated students.
§ Including two who had previously been non-matricolated students.

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II.—Numbers and Religious Persuasions of Students attending Lectures in the Queen's College, Galway, in each Session from its opening.

Session.	Matriculated Students.	Non-Matriculated Students.	Total.	Members of Established Church.	Roman Catholics.	Presbyterians.	Wesleyan Methodists.	Independents.	Various.	Total.
1849–50, . .	64	4	68	24	38	6	–	–	–	68
1850–51, . .	60	3	63	22	28	13	–	–	–	63
1851–52, .	68		73	25	41	7	–	–	–	73
1852–53, . .	73	2	75	26	40	9	–	–	–	75
1853–54, . .	76	5	81	30	42	9	–	–	–	81
1854–55, . .	69	16	85	32	46	5	2	–	–	85
1855–56, .	78	9	87	26	42	14	3	2	–	87
1856–57, . .	88	8	96	30	49	10	3	3	1	96
1857–58, . .	92	8	100	31	47	16	3	2	1	100
1858–59, . .	113	9	122	37	64	15	4	1	1	122
1859–60, . .	111	7	118	31	69	11	2	2	3	118
1860–61, . .	141	3	144	33	85	19	3	2	2	144
1861–62, . .	148	5	153	39	91	19	3	1	–	153
1862–63, . .	161	4	165	33	95	32	2	–	3	165
1863–64, . .	160	5	165	41	91	25	3	4	1	165
1864–65, . .	157	12	169	50	78	31	2	6	2	169
1865–66, . .	139	5	144	33	71	29	4	4	3	144
1866–67, . .	133	2	135	36	62	27	4	5	1	135
1867–68, . .	124	3	127	34	54	32	3	4	–	127
1868–69, . .	146	4	150	47	63	34	2	4	–	150
1869–70, . .	138	8	138	42	66	24	2	3	1	138
1870–71, . .	115	8	123	37	62	20	–	–	–	123
1871–72, . .	139	2	141	31	79	25	4	2	–	141
Total, . .	2,585	137	2,722	770	1,403	432	49	49	19	2,722

In Tables III. and IV. the numbers of Students attending the several Classes, and the numbers of Lectures delivered by each Professor are enumerated.

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III.—Return showing the Number of Students attending the Lectures of each Professor, in each year since the opening of the College

	1848-50.	1850-51	1851-52	1852-53.	1853-54	1854-55	1855-56.	1856-57.	1857-58.	1858-59.	1859-60.	1860-61	1861-62	1862-63	1863-64.	1864-65.	1865-66.	1866-67	1867-68.	1868-69	1869-70	1870-71	1871-72
Greek,	50	31	24	19	24	21	21	23	21	23	24	24	36	76	35	30	34	24	25	28	23	20	25
Latin,	50	27	24	22	21	19	20	23	21	22	23	24	29	35	36	32	35	29	24	27	27	22	29
Mathematics,	54	38	28	28	27	20	25	34	34	42	35	42	48	52	41	13	40	37	27	39	30	32	36
English, &c.,	47	43	28	23	23	32	22	27	30	31	22	29	24	38	39	40	22	23	22	24	23	24	26
Modern Languages,	54	23	23	19	25	37	29	34	30	30	52	70	77	70	71	78	72	65	60	65	64	57	66
Celtic Languages,	—	3	2	2	—	—	—	—	3	—	3	6	—	—	—	—	—	—	—	—	—	—	—
Natural Philosophy,	8	11	23	18	27	23	21	27	29	38	33	70	57	67	62	46	54	49	50	58	54	46	54
Natural History,	8	26	25	21	32	25	30	30	32	37	37	39	32	33	29	38	32	27	34	27	28	29	39
Logic and Metaphysics,	—	20	17	14	14	14	13	14	15	16	17	19	21	23	25	30	20	16	23	17	21	14	22
Chemistry,	13	25	36	29	27	23	29	40	40	49	53	60	57	46	52	52	44	48	46	51	50	49	55
Mineralogy and Geology,	—	4	14	15	10	14	10	8	15	16	17	—	6	10	5	6	6	7	4	5	6	2	3
Engineering,	2	10	11	15	16	11	9	10	15	18	12	21	18	21	17	16	17	17	13	15	15	12	10
Agriculture,	4	5	5	5	8	8	7	11	14	7	7	—	3	5	2	—	—	—	—	—	—	—	—
Anatomy and Physiology,	10	9	8	15	18	18	22	35	39	47	52	71	68	65	56	54	53	53	54	65	59	57	71
Materia Medica & Medical Jurisprudence,	—	5	9	11	16	7	8	17	13	24	20	26	34	28	32	23	18	36	20	32	28	27	28
Surgery,	—	—	6	12	7	7	8	13	13	18	20	19	33	27	26	28	24	12	19	21	18	13	21
Midwifery,	—	—	4	7	4	—	4	3	11	5	11	12	14	17	12	14	14	9	8	9	8	10	15
Medicine,	—	—	—	4	4	2	6	6	7	7	8	8	16	21	26	18	15	10	15	14	14	12	16
English Law,	4	4	5	6	8	7	5	4	3	7	7	4	7	7	7	8	6	7	8	12	12	12	13
Jurisprudence and Political Economy,	4	4	12	13	16	10	8	9	7	17	13	10	5	9	8	8	10	12	14	15	11	13	12

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IV.—Return of the Number of Lectures delivered by each Professor in each Session since the opening of the College.

	1849–50	1850–51	1851–52.	1852–53.	1853–54.	1854–55.	1855–56.	1856–57.	1857–58.	1858–59	1859–60.	1860–61	1861–62	1862–63.	1863–64	1864–65	1865–66.	1866–67.	1867–68.	1868–69	1869–70.	1870–71	1871–72
Greek,	285	284	216	324	248	249	217	262	223	246	210	229	*315	200	265	235	247	274	246	249	257	263	246
Latin,	270	253	212	258	233	190	217	244	195	183	189	186	181	263	220	287	236	248	224	209	267	239	248
Mathematics,	221	255	200	167	164	211	181	†109	†234	†235	†209	210	†213	†189	†199	†215	†198	212	177	206	209	214	200
English, &c.,	37	23	77	97	126	128	127	107	100	92	97	76	15	160	147	145	136	155	156	182	120	139	140
Modern Languages,	212	249	207	175	185	160	155	†102	†154	†151	†169	†246	†244	†229	†204	256	†269	†163	†272	†282	†287	280	310
Celtic Languages,	—	30	35	30	—	—	—	‡3	48	—	30	24	—	—	—	—	—	—	—	—	—	—	—
Natural Philosophy,	93	154	123	207	139	173	225	174	173	182	172	213	196	211	203	229	255	233	257	259	285	269	253
Natural History,	—	120	85	82	85	78	66	66	67	77	76	56	57	62	70	82	77	70	60	80	104	101	103
Logic and Metaphysics,	—	40	114	150	123	141	136	162	106	103	170	105	132	182	146	157	139	172	171	141	131	136	129
Chemistry,	32	111	128	140	113	128	97	101	107	98	100	95	91	95	99	97	102	94	97	91	105	94	95
Mineralogy and Geology,	—	51	45	57	51	90	45	40	60	64	84	§—	81	49	66	56	58	68	60	51	61	57	57
Engineering,	9	116	105	97	80	78	112	111	122	126	81	182	188	241	211	249	226	237	258	226	252	246	264
Agriculture,	—	166	182	180	144	160	192	174	123	154	182	83	65	54	26	—	—	—	—	—	—	—	—
Anatomy and Physiology,	111	112	111	106	109	115	104	103	102	104	‖116	‖96	‖90	‖84	‖105	‖110	‖96	‖137	‖118	‖117	‖121	120	121
Materia Medica & Medical Jurisprudence,	—	51	60	90	95	93	85	96	90	90	77	85	78	88	83	84	84	84	79	77	76	78	81
Surgery,	—	—	—	61	62	62	61	62	60	53	59	60	55	60	60	50	49	58	61	54	60	53	54
Midwifery,	—	—	—	59	70	62	—	62	61	60	59	54	51	60	51	54	51	55	53	57	55	58	50
Medicine,	—	—	—	64	62	61	62	60	60	58	62	55	48	50	50	49	51	54	55	53	45	48	47
English Law,	16	48	55	67	71	72	73	40	35	48	49	72	68	84	68	60	86	61	77	75	80	75	93
Jurisprudence and Political Economy,	20	48	60	96	108	95	60	52	51	97	49	67	80	67	83	70	53	73	85	78	93	100	92

* Exclusive of 72 lectures to extra classes.
† Exclusive of a Course of Lectures given by the Senior Scholar.
‡ These Lectures were open to the Public
§ Owing to an alteration in the Ordinances of the University, no Lectures on Mineralogy and Geology were delivered this Session.
‖ Exclusive of Anatomical Demonstrations.

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Entrances and Attendances in Galway College during present Session (1871–72).

The circumstances of the present session are most encouraging, the entrances have been large and well represent the different persuasions. They amount to 63; of these 19 are members of the Church of Ireland, 10 of the Presbyterian Church, and 4 of other Protestant persuasions, while 30 belong to the Catholic Church. The importance of these last numbers may be estimated by one fact. Previous to the foundation of the Queen's Colleges in 1845, but one University—the Dublin University—existed in Ireland, and to that the Roman Catholics very generally resorted, without any opposition from their Church. The number of Catholics then amounted to 7,000,000, and the average yearly entrance of Catholics into the institution was 29.* There are now four University Colleges in Ireland. The Catholics have diminished from seven to four millions.† The number of Catholics resorting to the Dublin University has increased, while large classes are atteuding in Cork, aud many in Belfast, and the *entrance* of Catholics into Galway College alone in this session has amounted to 30. The *attendances* amount to 141, of which 31 belong to the Church of Ireland; 79 to the Roman Catholic Church; 25 are Presbyterians; and 6 are of other denominations.

Progress and Success of the Three Queen's Colleges.

If there are institutions that require time to gather round them the public confidence which is necessary to their full development and success, they are Colleges and Universities. Centuries, uot years, have been necessary to raise to perfect growth the most famous colleges. If this be the case, even under circumstances the most fortunate, how mueh more so in the present case, when the period at which these colleges were opened, and the events attending it, are remembered. They were *simultaneously* opened in 1849, when the country was plunged in the lowest depth of destitution, when hope had given way to despair; and they have been subjected ever since then to an opposition formidable and implacable.

What then has been the result of this experiment to unite and enlighten our people? We are in our twenty-third year—a moment of time in the life of Colleges—and the entrances into the three Colleges up to the present day amount to 5,398.‡ These numbers do not indicate separate individuals, as in some cases students pass from one College to another, and are counted twice; but these numbers are subsequently checked and corrected at the Queen's University; and it appears that the number of distinct individuals who have entered the Colleges amount to 5,109.

Now, when it is remembered that in the same period from six to seven thousand students have entered the Dublin University; that many thousands have in the same time entered Maynooth

* In the ten years that preceded 1845, 290 Catholics entered the Dublin University.

† In 1871 the Catholics amounted to 4,141,933.

‡ Of these 5,398 entrances, 1,536 were Roman Catholics.

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College, and the several other ecclesiastical institutions in which the priesthood of the Catholic Church are educated; that the numbers of our people have diminished in the same time from 7,256,314 to 5,402,759; a large and gratifying success may be claimed for these Colleges.

This Success shared Equally by all the Colleges.

In estimating the progress of Galway College as compared with the Colleges of Cork and Belfast, the advantages the two latter enjoy in the larger population and wealth of the provinces to which they belong, and, above all, in the population, wealth, and schools of the great towns in their vicinity, must be remembered. The populations of the respective provinces in the census of 1871 were:—Munster, 1,390,402; Ulster, 1,830,398; Connaught, 845,993. This consideration alone would give a great superiority to the Colleges of Ulster and Cork; but the populations of the towns in which the Colleges are situate—Belfast, 174,394; Cork, 78,382; Galway, 13,184—render that superiority conspicuous and certain. Nevertheless, of the 5,398 entrances into the Colleges since their opening, 1,129 have been in Galway; of the 1,536 Roman Catholic entrances into the Colleges—a matter of the last importance—515 have been in Galway. These are no small items in the progress of the Colleges. Let me here state some more facts with respect to the manner in which this College has fulfilled the ends for which it was instituted. Those ends were to unite the people of all religious persuasions in academic instruction, and to afford such instruction to the classes "below the highest and above the lowest." It will be seen that, of the 1,129 entrances into the College since its opening, 385 have been members of the Church of Ireland, 515 of the Roman Catholic Church, 182 of the Presbyterian Church, 25 have been Wesleyans, 14 Independents, and 8 of other persuasions. This, I presume, may be claimed as united education. The following return gives the professions of the fathers of the students, as far as they are known, who entered the College in the *five* years from 1867–68 to end of session 1871–72:—

Total Number who entered during this period from 1868–69 to 1871–72,	319
Professions of their Fathers.	
Gentlemen,	59
Clergymen,	30
Lawyers,	8
Medical men,	21
Merchants, Bankers, and Manufacturers,	34
Farmers,	86
Magistrates (Stipendiary and Civil Service),	7
Engineers and Architects,	8
Army and Navy,	5
Schoolmasters,	7
Agents and Overseers,	7
Tradesmen and Artisans,	9
Miscellaneous and unreturned,	30
	319

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These appear to be the very classes contemplated by the founders of the Queen's Colleges as recipients of the instruction given in them.* Nor can I here refrain from giving a return lately required of the localities from which the students attending this College came in the year 1870–71, as it will show how largely, notwithstandiug the resistance aud obloquy the College has met with, and notwithstanding that 1870–71 was an exceptionally bad year, the popularity of the institution has extended, as is manifested in the number of places sending students to her classes, and approving of her system and teaching :—

SESSION 1870–71.

Counties to which Students belong who attended Galway College in this Session.

England (various counties),	7	King's County,	3
Galway,	51	Antrim,	4
Roscommon,	5	Longford,	3
Mayo,	2	Kildare,	2
Sligo,	1	Enniskillen,	2
Clare,	15	Meath,	2
Limerick,	8	Donegal,	1
Tyrone,	5	Cavan,	1
Dublin,	3	Fermanagh,	1
Armagh,	4	Louth,	1
Derry,	4	Carlow,	1
Monaghan,	4		
Down,	4		134

Thus, then, the College unites and informs the classes for which it was intended, and ahcady possesses a wide and gratifying popularity.

DEVOTION OF STUDENTS TO THEIR STUDIES AFTER ENTRANCE AND "SUCCESS" OF QUEEN'S UNIVERSITY.

These returns of *entrances* give but an inadequate idea of what Colleges ought to do. They give but the *entrances,* and afford no proof of whether and how far the students prosecute their studies. For that the records of the Queen's University afford au answer. It is unnecessary to refer to the slow and painful steps with which the greatest and most famous Universities arrive at their full maturity. The Queen's University has been in existence but twenty-one years, and in that short period 1,275 distinct students have graduated there. This represents the continued devotion of the students of the Colleges to their studies; and here again the Galway College has fully kept pace with the Colleges of Belfast and Cork, if regard be had to the population and circumstances of the provinces. 611 have graduated from Belfast, 372 from Cork, and 292 from Galway. These facts demoustrate the attention of the students of the Colleges to their studies.

* Speech of Earl of Derby on introducing Colleges Bill to the Lords, July 21st, 1845 :—"If there be one class which, more than any other, should obtain the advantages of a liberal and sound education, it is the middle classes, and by 'middle classes' I mean the classes below the highest and above the lowest, and this is the class which your lordships are now called to legislate upon."

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Success of Galway Students at Queen's University.

The success of the Galway students at the recent examinations at the Queen's University* has been brilliant, and most creditable to their College. The list of prizes obtained at the last University examination shows that for the M.A. degree, two first-class honours out of six were awarded to students from the Galway College; for the B.A. degree, three first-class honours out of seven; for the M.D. degree, the only first-class honour awarded; for the B.E. degree, the only first-class honour. In all seven first-class honours out of fifteen awarded.†

Success of Galway Students at Competitive Examinations.

The successes too of the Galway students at the Government competitive examinations, have done honour to their College and their country. Mr. R. West, a former student of the College, has recently been appointed Judge of the High Court of Bombay. The late Mr. B. Norton, a previous student there, held the important office of Judge of the Supreme Court of Demerara for several years. Mr. J. Monroe, one of the most rising juniors of the Irish Bar, was educated in that College, and on leaving it obtained the Studentship of the Inns of Court, London. At the first examination held at the King's Inns, Dublin, the first place was obtained by a student from the Galway College. *Within the last few weeks* three other students of that College have gained high distinction. Mr. R. Ievers obtained the first place at the examination for Ceylon Writerships. Mr. Harrison obtained second place at the competitive examination for the India Civil Service, and Mr. Robert McSwiney, the Studentship of the Inns of Court, London, against 51 competitors from all the leading Universities in the Empire. These are merely a few instances out of a list of many others which have been gained by the students of the Galway College. This is sufficient proof that the present condition of the College and University is satisfactory, and that the language may be adopted of one whose perfect knowledge of Ireland entitled his opinions to the utmost respect, whose high character has, if possible, been enhanced by his sad fate. In the language of Lord Mayo, it may be said, "The Queen's Colleges are doing their work well."

Cry of "Godless," Unfounded and Unjustifiable.

On one subject deeply connected with the working of these Colleges, great misapprehension, to use the mildest expression, exists in a portion of the public mind. This is the imputed absence from them of all religious superintendence of the students; in other words, to use the language of their calumniators, their "Godless" character. How far this is true may be

* October, 1871.

† At the recent University Examinations for 1872 the success of the Galway students continues to be gratifying. At the M.A. examination three first-class honors out of nine, and at the B.A. examination two first-class honors out of four, were awarded to them.

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judged of by this. Ministers of religion, entitled Deans of Residence, approved of by the heads of the church or congregation to which they belong, are appointed in all the Colleges, to whom the spiritual charge and moral care of the students of their own persuasions, not residing with their own parents or guardians, are intrusted.

What actually takes place in Galway College? There are 31 members of the Church of Ireland in attendance on lectures, and they have their Dean of Residence to protect their moral and spiritual interests. There are 25 members of the Presbyterian Church, and they have their Dean for the same sacred duties. There are 4 of the Wesleyan persuasion, and they have their Dean to attend to their interests. There are 2 Independents, and these have their Dean of Residence to attend to their spiritual interests and moral care. Of these Deans of Residence, there are six in Belfast College and five, I believe, in Cork. Such is the "Godless" condition of these Colleges! When this cry is repeated with a zeal that might be employed in a better cause, and which men of station and candour ought to be ashamed to use, one cannot but remember the indignant terms in which the late Archbishop Murray dealt with this shameless calumny. "How absurd," said this great pillar of the Roman Catholic Church—"How absurd to designate as Godless institutions, those which comprise the ministers of religion appointed for the express purpose of teaching the students to adore, to love, and to serve God."*

By the decree of the Synod of Thurles (passed by a majority of one or two) any Catholic clergyman who accepts the post of Catholic Dean of Residences to the Catholic students of the Queen's College, and who would give them religious instruction and watch over their faith and morals, is suspended *ipso facto!* Surely, then, a knowledge of this decree, and of the fact that the students of all Protestant persuasions receive religious education and are watched over by their spiritual pastors, should prevent any candid Catholic from raising the cry of "Godless" against the Colleges!

ACTUAL NUMBERS ATTENDING THIS SESSION (1871-72) IN QUEEN'S COLLEGES, AND THEIR PROPORTION TO NUMBERS IN PREPARATORY SCHOOLS.

The actual numbers now attending in the Colleges of Belfast, Cork, and Galway are 745; of these 545 are Protestants, 200 Catholics; of these Catholics, 79 are attending in Galway alone.

The importance of these numbers may be judged of by regarding the field to which the Colleges must look for students; that field is limited by the Classical Preparatory Schools. By the number of pupils in these schools the numbers in the Colleges must be determined, for surely no one would compare the number of students in Colleges and Universities with the gross population.

* Letter of Dr. Murray to the "Tablet" on the Rescripts against Queen's Colleges. 11th February, 1850.

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Such a course, however fair in the case of National schools, would be absurd in the case of Colleges. Now, the numbers in the Classical Preparatory Schools appear, from the Census Report of 1861, part iv., p. 51 (the last Report published), to have been :—

In Schools under Societies and Boards, ...	4,298
In Private Schools, ...	6,048
Total, ...	10,346

Of this total, 5,228 were Protestants, and 5,118 Roman Catholics. These preparatory schools (the Report informs us) are those which feed the Dublin University, the Queen's Colleges, and the several Roman Catholic seminaries, like Maynooth, in which candidates for the Roman Catholic ministry are educated.

Cause of Large Proportion which Protestants Bear to Catholics in the Dublin University and Queen's Colleges.

The large proportion which the Protestant bear to the Catholic students in the Dublin University and the Queen's Colleges arises from a simple fact which is carefully suppressed by the opponents of united education. It is this:—These Protestant students include almost all candidates preparing for the ministry of the Episcopalian and Presbyterian Churches, while the Catholic students do not include any candidates for the ministry of the Roman Catholic Church. This fact is attested by the same Census Report (page 60)—

"The very small proportion of Roman Catholic students receiving university instruction requires, perhaps, more explanation, because they are taken from the class of those undergoing intermediate instruction, which has an absolute majority over the Protestants of the same class. If, however, we deduct from the number of Roman Catholics pursuing classical studies, those who pass to the colleges of Maynooth, All-Hallows, and several continental seminaries, to follow up their studies preparatory for the priesthood, the disproportion will appear less, when we take into account that nearly all the candidates for the ministry of the Established Church graduate in the University of Dublin, to which they contribute a very large proportion of its students."

It should be remembered that the training for the Catholic priesthood must, under any system of education, be carried on in separate institutions. It is therefore grossly fallacious to speak of such students as excluded by present circumstances from university education. Now the same Census Report (p. 48) informs us that the numbers frequenting Maynooth and the seven other

"Colleges for professional education, *without resort to Universities*, amounted in 1861 to 1,161 ; that of these, four, containing 889 students are established for the special education of the Roman Catholic clergy, while the others, containing 272, although primarily for the same purpose, have the secular or non-professional part of their courses open to lay students."

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We may, then, safely conclude that at least 1,000 are preparing in these seminaries for the ministry of the Roman Catholic Church, and should be added to the Catholic students in the Dublin University and Queen's Colleges, to determine how far the Catholic need for higher education is supplied.

Is Feeling of Catholic Laity Against the Queen's Colleges?

The colleges and united education, we are told, are detested by the Irish people. If so, what need of this unsleeping opposition to them? Why have Rescripts been obtained from Rome to crush them? Why have synods been held under every circumstance of solemnity that can give them importance, to overturn them? Why do the press, the altars, and the hustings resound with denunciations against them?

It has not been the wont of the Catholic Church to throw away her ammunition uselessly, as she would be doing if the public mind were hostile to the colleges. If the colleges had not attracted a student it would be still certain that they were not unacceptable to the people when such continued and tremendous efforts had been necessary to drive them from them. But when all this labour has failed and Catholics in large numbers frequent these colleges, can any doubt exist that the public mind is not opposed to them, and that the Catholics yearn for intercourse and communion with their fellow Christians? Then as to the lures with which we are told they bribe their students to frequent them—what are they? They amount to £1,500 in each, or £4,500 in the three colleges; and for this they can show this session 745 students in constant attendance on lectures. Does the history of Ireland declare that her people are so easily lured from their faith? The Dublin University, with £11,000 or £12,000 a year in scholarships and exhibitions, has only 800 in attendance on lectures, and no one accuses her of bribing her students to her halls. In Oxford University some years since 1,200 Scholarships and Exhibitions of the annual value of £80,000 were bestowed on little more than 1,400 or 1,500 undergraduates (Rogers, "Education in Oxford," pages 218 and 231). In fact, the aids to learning in the Queen's Colleges are miserably small and ought to be much increased.

Is the Feeling of Catholic Laity in Favour of Denominational Education?

What proofs are there of the attachment of the people to the denominational system? If anywhere, it must be found in the success of the Catholic University? That institution is situated in the capital of Ireland, surrounded by more than 200,000 Catholics. She has a staff of Professors of the highest eminence, and her inducements in scholarships are as large as in any of the Queen's Colleges. Is the love of the people for the denominational system shown in the success which has attended that institution?

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At the close of the last Session of Parliament certain statistical returns relating to the Queen's Colleges in the year 1868–9 were prepared by order of the House of Commons. The general summary of these returns, so far as they relate to this college, will be found in Table V. I also append in Tables VI., VII., and VIII. a similar summary for the Sessions 1869–70, 1870–71, 1871–72.

V.—General Summary of Statistical Returns, 1868–9.

—	Church of Ireland.	Presbyterians.	Roman Catholics.	Other denominations.	Total.	Students who in 1868–9 or in any previous Session were in Faculty of Arts.	Students who at any time held Scholarships or Exhibitions, whether in		Students who did not hold any Scholarship or Exhibition in 1868–9.	Students who never held any Scholarship or Exhibition.
							1868–9.	Or any previous Session.		
Faculty of Arts,	8	11	16	3	38	38	31	–	7	7
„ Law,	3	2	7	–	12	9	6	2	6	4
„ Medicine,	27	13	30	1	71	11	19	9	32	43
Department of Engineering,	4	3	6	1	14	–	8	8	6	3
Occasional Students,	3	4	7	1	15	14	6	6	9	3
Non-Matriculated Students,	2	1	1	–	4	2	–	–	4	4
Total,	47	34	67	6	154	74	70	20	34	64
Deduct for Students who attended in two Faculties, &c.,	–	–	4	–	4	–	–	–	–	–
Total of separate individuals,	47	34	63	6	150	–	–	–	–	–

VI.—1869–70.

—	Church of Ireland.	Presbyterians.	Roman Catholics.	Other denominations.	Total.	Students who in 1869–70 or any previous session were in Faculty of Arts.	Students who at any time held Scholarships or Exhibitions, whether in		Students who did not hold any Scholarship or Exhibition in 1869–70.	Students who never held any Scholarship or Exhibition.
							1869–70.	Or any previous Session.		
Faculty of Arts,	4	12	21	–	37	37	28	3	9	6
„ Law,	2	3	7	1	12	10	10	–	2	2
„ Medicine,	25	5	33	2	65	9	17	6	43	42
Department of Engineering,	4	4	5	2	15	3	13	–	2	2
Occasional Students,	4	1	1	2	8	8	6	1	2	1
Non-Matriculated Students,	3	1	4	–	8	4	–	–	3	3
Total,	42	26	71	6	145	71	74	10	71	61
Deduct for Students who attended in two Faculties, &c.,	–	2	5	–	7	–	–	–	–	–
Total of separate individuals,	42	24	66	6	138	–	–	–	–	–

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VII.—1870-71.

—	Church of Ireland.	Presbyterians.	Roman Catholics.	Other denominations.	Total.	Students who in 1870-71 or any previous session were in Faculty of Arts.	Students who at any time held Scholarships or Exhibitions, whether in		Students who did not hold any Scholarship or Exhibition in 1870-71.	Students who never held any Scholarship or Exhibition.
							1870-71.	Or any previous Session.		
Faculty of Arts, . . .	8	9	18	–	35	35	33	18	2	1
„ Law, . . .	–	3	9	–	12	12	9	10	3	1
„ Medicine, . .	22	8	29	1	60	11	17	15	43	39
Department of Engineering,	2	1	8	1	12	3	9	7	3	1
Occasional Students, . .	3	1	2	1	7	5	5	5	2	2
Non-Matriculated Students,	3	2	2	1	8	3	–	–	8	8
Total, ...	38	24	68	4	134	69	73	55	61	52
Deduct for Students who attended in two Faculties, &c., ...	1	4	6	–	11	–	–	–	–	–
Total of separate individuals,	37	20	62	4	123	–	–	–	–	–

VIII.—1871-72.

—	Church of Ireland.	Presbyterians.	Roman Catholics.	Other denominations.	Total.	Students who in 1871-72 or any previous session were in Faculty of Arts.	Students who at any time held Scholarships or Exhibitions, whether in		Students who did not hold any Scholarship or Exhibition in 1871-72.	Students who never held any Scholarship or Exhibition.
							1871-72.	Or any previous Session.		
Faculty of Arts, . . .	8	12	21	2	43	43	33	2	10	8
„ Law, . . .	1	4	8	–	13	10	9	1	4	3
„ Medicine, . .	17	9	47	5	78	10	21	9	57	48
Department of Engineering,	4	1	5	–	10	2	5	3	5	2
Occasional Students, . .	1	1	2	–	4	4	3	1	1	–
Non-Matriculated Students,	2	–	–	–	2	–	–	–	2	2
Total, ...	33	27	83	7	150	69	71	16	79	63
Deduct for Students who attended in two Faculties, &c., ...	2	2	4	1	9	–	–	–	–	–
Total of separate individuals,	31	25	79	6	141	–	–	–	–	–

In the Appendix will be found detailed information as to the courses of instruction pursued in the College, and selections from the Questions set to Candidates at the Scholarship and other Examinations.

EDWARD BERWICK,
President.

QUEEN'S COLLEGE, GALWAY,
November, 1872.

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APPENDIX.

APPENDIX, No. 1.

QUEEN'S COLLEGE, GALWAY, 1872-73.

DAYS AND HOURS OF MATRICULATION AND SCHOLARSHIP EXAMINATIONS. OCTOBER, 1872.

DAYS.	HOURS.	FIRST YEAR.	SECOND YEAR.	THIRD YEAR.
Tuesday, 15th Oct.	10—5		Supplementary Examinations.	Supplementary Examinations.
Wednesday, 16th Oct.	10—5		Supplementary Examinations.	Supplementary Examinations.
Thursday, 17th Oct.	10—1		Lit. Schol.—Latin. Med. } Schol.—Chem. Engin. }	
	2—5		Lit. Schol.—Greek. Med. } Schol.—Chem. Engin. }	
Friday, 18th Oct.	10—1	Matriculation.	Lit. Schol.—English. Eng. Schol.—Geom. Draw., &c.	
	2—5	Matriculation.	Lit. Schol.—English. Eng. Schol.—Geom. Draw., &c.	
Saturday, 19th Oct.	10—1		Lit. Schol.—Latin. Med. Schol.—Nat. Hist.	
	2—5		Lit. Schol.—Greek. Med. Schol.—Nat. Hist.	
Monday, 21st Oct.	10—1	Lit. } Schol.—English. Med. } Lic. in Arts Ex.	Med. } Schol.—Mod. Lang. Lit. }	Engin. Schol.—Engin.
	2—5	Lit. } Schol.—Greek. Med. }		Engin. Schol.—Engin.
Tuesday, 22nd Oct.	10—1	Lit. } Schol.—Latin. Med. }		Engin. Schol.—Min. & Geol.
	2—5	Lit. } Schol.—Greek. Med. }		
Wednesday, 23rd Oct.	10—1	Lit. } Schol.—Latin. Med. }	Med. Schol.—Nat. Phil.	Engin. Schol.—Nat. Phil.
	2—5	Science } Schol.—Math. Med. } Engin. } Lic. in Arts Ex.	Science } Schol.—Math. Engin. }	Engin. Schol.—Nat. Phil.
Thursday, 24th Oct.	10—1	Science } Schol.—Math. Med. } Engin. }	Science } Schol.—Math. Engin. } Med. Schol.—Anat.	Engin. Schol.—Math.
	2—5		Med. Schol.—Anat.	Engin. Schol.—Math.

The Examination for the Third and Fourth Year Scholarships in MEDICINE will commence on Thursday, the 24th October.

Arrangements will be made for holding the Examinations for Law Scholarships early in December.

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Appendix. No. 1.

QUEEN'S COLLEGE, GALWAY.—Founded December 30, 1845.

This College is a Corporation, founded by Letters Patent under the Great Seal of Ireland, under the name and style of the "President and Professors of Queen'e College, Galway."

The general government and administration of the College under the Statutes, and in cases not provided for by the Statutes, is vested in a Council consisting of the President, and six Professors elected by the Corporate Body.

Visitors.

His Grace the Lord Primate.
The Most Honorable the Marquess of Kildare.
The Right Honorable the Chief Secretary for Ireland.
The Right Reverend the Lord Bishop of Tuam.
The Most Revorend Archbishop M'Hale.
The Right Honorable Mr. Justice FitzGerald.
The Moderator of the General Assembly.
The President of the College of Physicians.
The President of the Royal College of Surgeons.

President.

Edward Berwick, B.A.

Council.—1872–73.

The President.
George J. Allman, LL.D.
Arthur H. Curtis, LL.D.
Thomas W. Moffett, LL.D.
James V. Browne, M.D.
John Cleland, M.D.
Edward Townsend, M.A.

Professors.

Greek,	D'Arcy W. Thompson, M.A.
Latin,	Thomas Maguire, LL.D.
Mathematics,	George Johnston Allman, LL.D.
Natural Philosophy,	Arthur H. Curtis, LL.D.
History, English Literature, and Mental Science,	Thomas W. Moffett, LL.D.
Chemistry,	Thomas H. Rowney, PH.D.
Natural History,	Alexander G. Melville, M.D. Edin., M.R.C.S. Eng.
Mineralogy and Geology,	Wm. King, D. Sc.
Modern Languages,	Charles Geisler, PH.D.
Jurisprud. and Polit. Econ.	William Lupton, M.A.
English Law,	William B. Campion, Q.C.
Anatomy and Physiology,	John Cleland, M.D., F.R.S.
Practice of Medicine,	Nicholas Colahan, M.D., F.R.S., Edin.
Practice of Surgery,	James V. Browne, M.D., L.R.C.S.I.
Materia Medica,	Simon M'Coy, F.R.C.S.I.
Midwifery,	Richard Doherty, M.D., Hon. V.P., Obstet. Soc. Dub
Medical Jurisprudence,	
Civil Engineering,	Edward Townsend, M.A.

Office-Bearers.

Thomas W. Moffett, LL.D.,	Registrar.
George J. Allman, LL.D.,	Bursar.
John H. Richardson, B.A.,	Librarian.

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Deans of Residence.

Church of Ireland,	Rev. James O'Sullivan, M.A
General Assembly of the Presbyterian Church in Ireland,	Rev. William Adair.
Wesleyan Methodist Church,	Rev. Oliver M'Cutcheon.
Independent Church.	Rev. John Kydd.

The College Session.

The College Session is divided into three Terms.

The First Term of the Session 1871–2 commenced on Tuesday, October 17, and ends on December 23, 1871.

The Second Term commences on January 8, and ends on Saturday, March 23, 1872.

The Third Term commences on April 8, and ends on Saturday, June 8, 1872.

The First Term of the Session 1872–3 commences on Tuesday, October 15, and ends on December 21, 1872.

Students.

Students are either Matriculated or Non-Matriculated.

Matriculated Students are required to pass an entrance or Matriculation Examination, and to pursue fixed courses of study.

Non-Matriculated are permitted to attend the Lectures of any of the Professors, without being required to pass the Matriculation or any other Examination.*

Matriculation.

Candidates for Degrees or Diplomas in the Queen's University, or for Scholarships, Exhibitions, or Prizes, in Queen's College, Galway, are required to pass a Matriculation Examination.

Students are admitted by examination to Matriculation in the Faculties of Arts, Law, and Medicine, and in the School of Engineering. In each Faculty and School special courses are prescribed for examination.†

The Matriculation Examination is held at the commencement of the first Term of each Session; but additional Matriculation Examinations are held before the close of the Term.

The last Matriculation Examination for Students in the Faculty of Medicine is held on the 16th of November.

Candidates for Matriculation are required to appear in the Registrar's office before the Matriculation Examination, for the purpose of entering their names on the College books.

Each candidate, before being admitted to the Matriculation Examination, is required to pay to the Bursar the Matriculation and College fee of ten shillings. This fee will be returned to such students as may fail to pass the Examination.

Attendance on Lectures.

Attendance upon Lectures is strictly prescribed to all Matriculated Students.

All Students shall pay the College Fee, and a moiety of their Class Fees, to the Bursar, and enter their names with the Registrar, before they are admitted to the classes of the several Professors.

The Registrar shall furnish to the Professors, before the commencement of Lectures in each Term, the rolls of their several classes, and from time to time such names as shall be afterwards entered with him.

* For further particulars of the status and privileges of Non-Matriculated Students, *vide* p. 21.

† *Vide* pp. 24, 31, 36, 41.

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Appendix, No. 1.

No Student shall have his name replaced on the rolls of the Professors at the commencement of the second Term who has not paid the second moiety of his Class Fees.

Attendance on Lectures includes preparation for Lectures; and it is competent for a Professor who, on any occasion, is not satisfied with the preparation of a Student, to refuse him credit for attendance.

Attendance upon Courses of Lectures in the Faculty of Arts is recognised in cases where Students pass to a different Faculty or School.

In case of absence arising from illness or other unavoidable cause, the Student is required to lodge with the Registrar, immediately on recommencing his attendance, a letter or certificate explaining his absence, to be laid before the Council.

Examinations.

A General Sessional Examination is held at the close of each Session in the subjects upon which Lectures have been delivered during the Session. There is also a Supplementary Examination on the same subjects at the commencement of the following Session.

Every Matriculated Student in the Faculties of Arts and Law, and in the School of Engineering, must pass either the General Examination or the Supplementary Examination before his name can be entered on the College Register as having completed the Session; and no Student in these Faculties and Schools can be permitted to enter upon the Course of the succeeding year until he has so completed the previous Session.

No Student is admitted to the Sessional or the Supplementary Examination who has not kept the Courses of Lectures prescribed to Students of this class and standing.*

Scholarships.

Forty-six Junior and eight Senior Scholarships have been founded in the College.

Of the Junior Scholarships†—

Thirty, of the value of £24 each, are appropriated to Students pursuing the Course prescribed for the Degree of B.A.

Three, of the value of £20 each, to Students pursuing the Course for the Diploma of Elementary Law and the Degree of LL.B.

Eight, of the value of £25 each, to Students pursuing the Course for the Degree of M.D.

Five, of the value of £20 each, to Students pursuing the Course for the Diploma of Civil Engineering.

The Examinations for Junior Scholarships are held at the commencement of the First Term of the Session.

No Student is allowed to become a Candidate for a Junior Scholarship until he has paid the College Fee and one-half of the Class Fees for the current Session.

No Student is permitted to present himself as a Candidate for a Senior Scholarship who has not entered his name with the Registrar, and paid the College Fee to the Bursar.

All Senior Scholars in Arts are required to be in attendance in the College during their period of office.

Junior Scholars are exempted from the payment of one moiety of the Class Fees for the courses prescribed to Students of their faculty and standing.

No Student can hold the same Scholarship a second time.

No Scholarship will in any case be awarded, unless the Candidates are, in the opinion of the Examiners, sufficiently qualified in the prescribed courses.

* For University Examinations, see the "University Regulations."

† For the distribution of these Scholarships, the subjects of Examination, and the conditions upon which they are held, *vide* pp. 26, 30, 32, 33, 38–40, 43, 44.

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Exhibitions.

The College is empowered to award Exhibitions, varying in value from £10 to £20, at the same Examinations as the Scholarships, and to be held upon the same terms.

Exhibitioners are required to pay the whole amount of the Class Fees for the Session.

No Student is allowed to compete for a Junior Scholarship or Exhibition in any course substantially the same as that in which he has already held a Scholarship or Exhibition.

All Junior Scholars and Exhibitioners are required to attend lectures, and pass the Sessional Examinations during their year of office.

Prizes.

The College is empowered to award Prizes, by examination, at the close of the Session, to the most distinguished answerers in the several courses of study pursued during the Session.

Two prizes for English prose composition, and two prizes for Geometry,* have been founded in the College, to be awarded annually at entrance:—first prize for English prose composition, £3 worth of books; second do., £2 worth of books: first prize for Geometry, £3 worth of books; second do., £2 worth of books.

All Candidates for Scholarships, Exhibitions, or Prizes, must have passed the Matriculation Examination in the Faculty or School to which the Scholarships, Exhibitions, or Prizes are attached.

Non-Matriculated Students.

Non-Matriculated Students are those who are permitted to attend the Lectures of any of the Professors without being required to pass the Matriculation or any other examination. They are required to pay to the Bursar the regulated Fees for the Classes proposed to be attended, and to sign an engagement to observe order and discipline in the College. They are not entitled to compete for Scholarships or other Collegiate distinctions.

During the term of their attendance on College Lectures they are admitted to read in the Library; and, on payment of a deposit of £1, are permitted to take out two volumes on loan, under the same regulations as Matriculated Students.

Every Non-Matriculated Student must pay to the Bursar one-half of his Class Fees before his name can be entered on the rolls of the several Classes, and the remainder at the commencement of the second Term.

Students of other Universities.

Any Student who shall have pursued part of his Collegiate Studies in any one of the Queen's Colleges, or in any University capable of granting Degrees in the several Faculties of Arts, Law, and Medicine, and any Legal or Medical Student who shall have pursued part of his Legal or Medical Studies under teachers recognised by the Senate of the Queen's University, on passing such Examinations, and fulfilling such other conditions as the Council shall prescribe, may take corresponding rank in this College; and also may compete for Scholarships or other Prizes of the corresponding year, provided he shall not hold at the same time a Scholarship or other office of emolument in any other University, College, or Medical School.

* Candidates are recommended to read M'Dowell's Exercises on Euclid and in Modern Geometry (Cambridge: Deighton, Bell, and Co., 1863), from beginning to page 150.

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Appendix, No. 1.

Fees.

The College Fees payable by Matriculated Students are 10*s.* at the commencement of the first year, and 5*s.* at the commencement of each subsequent year.

The Fees payable by Students, whether Matriculated or Non-Matriculated, to the several Professors for attendance on the several Pass Courses of Lectures or instruction, are £1 for each Course extending over one Term only, and £2 for each Course extending over more than one Term of a Session, when attended for the first time, and £1 for each re-attendance on the same.

This rule applies in all cases except the following:—

The Fee payable for the Course of Anatomy and Physiology is £3, when attended for the first time, and £2 for every subsequent attendance; and the Fee payable for Practical Anatomy or Practical Chemistry is £3 for each attendance.

The Fees payable for attendance upon Honor Courses of Lectures and upon Courses of Special Instruction not prescribed as a qualification for a Degree or other University distinction, are £2 for each Course, whether attended for the first time or re-attended.

This rule does not apply to special instruction in Practical Chemistry and in Operative Surgery. In the former case, the Fee is regulated by the time spent in the laboratory, at the rate of £1 a month. The Fee for Operative Surgery is £3.

Matriculated Students who attend voluntary Courses are, so far as these Courses are concerned, regarded as Non-Matriculated.

Table showing in each case the *minimum* amount of Fees payable by Students to the College and for attendance on the several prescribed Courses of Lectures and Instruction.

	First Session.			Second Session.			Third Session.		
	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
For the Degree of B.A.,	9	10	0	7	5	0	8	5	0
If a Scholar,	5	0	0	3	15	0	4	5	0
For the Degree of M.D.,		—			—			—	
If a Scholar,*		—			—			—	
For the Diploma of Elementary Law,	4	10	0	4	5	0	2	5	0
If a Scholar in Law,	2	10	0	2	5	0	1	5	0
For the Degrees of LL.B. and LL.D.	13	10	0	11	5	0	10	5	0
If a Scholar in Arts,	9	0	0	7	15	0	6	5	0
If a Scholar in Law,	11	10	0	9	5	0	5	5	0
For the Diploma of Civil Engineering,	10	10	0	10	5	0	8	5	0
If a Scholar,	5	10	0	6	5	0	3	5	0

In all cases the Fees are payable in two instalments. The first instalment includes the College Fee—which is 10*s.* for the first year, and 5*s.* for every subsequent year—and a moiety of the Class Fees payable to the several Professors whose lectures are prescribed in the curriculum. This first instalment is payable at the commencement of the First Term in which the Student enters. The second instalment—consisting of the remaining moiety of the Class Fees—is payable at the commencement of the Second Term. Scholars are exempted from the payment of this latter moiety.

Residences.

It is provided by the Statutes that every Matriculated Student under the age of twenty-one years shall reside, during the College Terms, with his parent or guardian, or with some relation or friend to whose care he

* The Fees for the Degree of M.D. vary according to the course of study pursued.

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shall have been committed by his parent or guardian, or in a Boarding-house, licensed by the President of the College, and arranged for the reception of Students, where he shall be placed under the moral care and spiritual charge of the Dean of Residences of his creed. *Appendix, No. 1.*

Discipline.

All Matriculated Students are required to wear a cap and gown.

A penalty of sixpence shall be imposed on any Student who shall appear within the quadrangle without his cap and gown.

The Porter at the lodge is instructed to report to the Bursar the name of any Matriculated Student who shall appear within the quadrangle without his cap and gown, and also to intimate to the Student at the time that he will be reported.

Any Student so reported shall pay the fine to the Bursar within one week, without receiving further notice, and the fine shall be doubled every week that the fine remains unpaid.

A Professor may inflict a fine not exceeding 2*s.* 6*d.* on any Student for any breach of discipline in his class which he does not consider of sufficient importance to bring under the notice of the Council.

Members of the Library Committee may inflict a fine not exceeding 2*s.* 6*d.* on any Student, for any breach of discipline in the Library, which they do not consider of sufficient importance to bring under the notice of the Council.

Library Regulations.

The Library is open from the commencement of the Session to the 1st of March, between the hours of 10 A.M. and 4 P.M., and from the 1st of March to the 1st of July, between the hours of 10 A.M. and 5 P.M., except (1) on College holidays; (2) for a period of five days in the Christmas and Easter recesses respectively.

The Library is closed during the month of July, except for one hour each week, when the Librarian attends to issue books. From the 1st of August to the commencement of the College Session the Library is open between the hours of 11 A.M. and 3 P.M.

No Student is admitted to the Library without subscribing the following declaration:—

> We the undersigned do hereby promise to the President and Council of the Queen's College, Galway, that we will not mark, turn down the leaves of, or write on paper placed upon, or in any way whatsoever soil, deface, injure, or remove, without permission, any book or document in the Library of said College. We also promise that we will not injure the Library furniture; that we will faithfully observe all the rules made for the regulation of the Library, and that we will acquaint the College Authorities with any serious instance of violation of the above rules which may come under our notice.

No Student can borrow books from the Library until he has deposited the sum of £1 with the Bursar.

No Student can have more than two volumes on loan from the Library at the same time.

No Student can retain a volume borrowed from the Library more than one week; but the borrower, on returning the book, may renew the loan, if the book has not been in the meantime applied for.

Any Student, on receiving at any time a notice from the Librarian, must return, within twenty-four hours, the books belonging to the Library in his possession.

Any person losing or injuring a book belonging to the Library must replace it by another copy of the same edition and of equal value, or pay such a sum of money as will enable the College to replace it.

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Appendix, No. 1.

FACULTY OF ARTS.

The Degrees of B.A. and M.A.

1.—*The Degree of Bachelor in Arts.*

Candidates for the Degree of B.A. in the Queen's University, must on entering Queen's College, Galway, pass the following Matriculation Examination.

MATHEMATICS.

Arithmetic—Including Vulgar and Decimal Fractions, the Rule of Three, Simple Interest, and the Extraction of the Square Root.
Algebra—Including Fractions, Proportion, and the Solution of Simple Equations.
Geometry—Euclid, Books I., II.

THE GREEK LANGUAGE.

Either of the following authors which the Candidate may select:—
Homer—Iliad, Books I. and II.
Xenophon—Anabasis, Books I. and II.

THE LATIN LANGUAGE.

Any one of the following authors which the Candidate may select:—
Virgil—Æneid, Books I.–V.
Horace—Odes, Book I.; Satires, Book I.
Sallust—Conspiracy of Catiline, and Jugurthine War.
Cæsar—Gallic War, Books V., VI.
Re-translation from English into Latin of portions of Cæsar.

HISTORY AND THE ENGLISH LANGUAGE.

History, Grecian and Roman, Outlines of.
Geography, Ancient and Modern, Outlines of.*
Grammar, English Grammar, and Composition.

Students are admitted to the University Examination for this Degree who, after having passed the Matriculation Examination, have attended the College Lectures for at least two full terms in each Session, have passed the prescribed College Examinations, and are recommended for promotion to the Degree by the President of the College.

The Session extends from the third Tuesday in October to the second Saturday in the following June, with short recesses at Christmas and Easter. Each Session consists of three Terms.

The studies for the Degree of Bachelor in Arts extend over three Sessions, and comprise attendance on the following Curriculum:—

FIRST SESSION.

English (One Term).
Greek.
Latin.
A Modern Continental Language.
Mathematics.

SECOND SESSION.

Logic (One Term).
Natural Philosophy.

Along with any two of the following:—

Greek (Second Course).
Latin (Second Course).
A Modern Continental Language (Second Course).
Mathematics (Second Course).

* Rev. T. K. Arnold's Handbooks are recommended.

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THIRD SESSION.

English Language and Literature.
Metaphysics, or History, or Political Economy (Two Terms).
Chemistry.
Zoology, or Botany.

Attendance on these Courses includes passing such Examinations as may be appointed by the College Council, and the catechetical parts of the Courses of Lectures.

In each College there is a General Examination in the subjects upon which lectures have been delivered during the Session. There is also a Supplementary Examination in the same subjects, at the commencement of the following Session. All Students must pass either the General Examination or the Supplementary Examination, before they proceed with the course of the succeeding year.

Candidates for the Degree of Bachelor in Arts must reside at their respective Colleges during at least the first two Terms of each Session, but may be exempted from residence during the third Term by a special grace of the College Council.

Third year's Students may substitute attendance on one or on two Courses of Honor Lectures, for attendance upon a like number of the Courses above set down for study in the Third Session.

Under this regulation Candidates are at liberty to substitute one or two of the following Courses for a like number of the Courses set down above, for study in the Third Session, viz. :—

Greek,
Latin,
Pure Mathematics,
Mathematical Physics,
Experimental Physics,
Geology and Physical Geography,
French,
German,
Italian,
Logic;

provided that the rules of the College Council admit of their making this substitution, and provided further that the Courses substituted are Courses specially preparing Students for one or more of the Honor Examinations for the Degree of B.A.

Candidates are allowed under the same conditions to attend Honor Courses on two of the subjects, Metaphysics, History, and Political Economy, as two of the Courses of the Third Session. Candidates who avail themselves of this permission are at liberty to attend the third of these subjects as another Course of the Third Session.

A similar interpretation applies to the Courses of Botany and Zoology, which will count as two Courses of the Third Session, provided that one of them be an Honor Course, attended under the conditions stated above.

Candidates for the Degree of Bachelor in Arts are required to pass two University Examinations—the Previous Examination held simultaneously in each of the Colleges of the University, and the Degree Examination held in the Hall of the University in Dublin.

Students who have completed their second Session must pass the Previous Examination before rising to the third year, unless prevented by illness or other inevitable accident, in which case the Senate may admit them to a Supplementary Examination.

For the regulations as to the First University Examination in Arts, and the Examination for the Degrees of B.A. and M.A., see the "University Regulations."

For the Exhibitions awarded at the First University Examination in Arts, see p. 44.

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Appendix No. 1.

DAYS AND HOURS OF LECTURES.

	Subjects.	Terms.	Mon.	Tues.	Wed.	Thurs.	Friday.	Sat.
1st Year	French,	1, 2, 3,	10	.	10	10	.	.
	German,	1, 2, 3,	.	11	.	.	.	12
	Latin (pass),	1, 2, 3,	12	.	12	.	12	.
	Greek (pass),	1, 2, 3,	.	11	.	12	.	12
	Mathematics (pass),	1, 2, 3,	1	.	1	.	1	.
	English,	2,	11	.	11	.	11	.
	Latin (honor),	1, 2, 3,	.	11	.	11	.	11
	Greek (honor),	1, 2, 3,	12	.	12	.	12	.
	Mathematics (honor),	1, 2, 3,	.	1	.	1	.	.
2nd Year	French,	1, 2, 3,	2	.	2	.	.	.
	German,	1, 2, 3,	.	12	.	12	.	.
	Greek,	1, 2, 3,	.	10	.	11	.	.
	Latin,	1, 2, 3,	11	.	11	.	11	.
	Mathematics (pass),	1, 2, 3,	.	1	.	1	.	.
	Natural Philosophy (pass),	1, 2, 3,	12	.	12	.	.	.
	Logic,	2,	1	.	1	.	1	.
	Mathematics (honor),	1, 2, 3,	12	.	12	.	12	.
	Natural Philosophy (honor),	1, 2, 3,	.	2	.	2	.	.
3rd Year	Zoology or Botany,	1, 2, 3,	.	11	.	11	11	11
	Chemistry,	1, 2, 3,	12	.	12	.	12	12
	English Langnage and Literature,	1, 2,	3	.	3	.	3	.
	Metaphysics,	1, 2,	.	1	.	1	.	1
	History,	1, 2,	2	.	2	.	2	.

JUNIOR SCHOLARSHIPS IN ARTS.

Of the Thirty Junior Scholarships appropriated to Students in the Faculty of Arts :—

Ten are tenable by Students of the First Year.
Ten " " Second Year.
Ten " " Third Year.

Of the ten Junior Scholarships in Arts tenable by Students of each year, five are awarded for proficiency in literary studies, and five for proficiency in scientific studies; but it is competent for the Council, in case Scholarships in either department are withheld on the ground of insufficient answering, to assign the unawarded Scholarships to the other department.

The Examination for Junior Scholarships in Arts of the first year takes place immediately after the first Matriculation Examination of the Session, and is open to all Students of the first year, who have passed that Examination, and have paid the regulated fees. Those candidates to whom Scholarships are then awarded hold their Scholarships for one year.

There is a further Examination, at the commencement of the second year, which is open to all Matriculated Students in Arts of that year who have passed the Examination and attended the lectures prescribed to Students of the first year, and who have paid the regulated fees.

Those Candidates to whom Scholarships are awarded at this further Examination, hold their Scholarships for two years, provided (1) they answer sufficiently in two Honor Courses at the Sessional Examination of the second year; (2) they pass the First Examination for the Degree of B.A.

If any Student be placed, at the Examinations for Junior Scholarships in Arts, first on both the lists of candidates, he is entitled to a Scholarship of each division; but in no other case can two Scholarships be held by the same Student.

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SCHOLARSHIP EXAMINATIONS.—SESSION 1872-3.

LITERARY SCHOLARSHIPS, FIRST YEAR.

THE GREEK LANGUAGE.

Homer—Iliad, Books V., VI., VII.
Euripides—Hecuba.
Xenophon—The Anabasis, Books I., II., III.

THE LATIN LANGUAGE.

Virgil—The Æneid, Books I.–VI.
Horace—The Odes, Books I., II.; the Satires; the Epistles.
Cicero—Pro Lege Manilia.
Sallust—Conspiracy of Catiline, and Jugurthine War.
Livy—Books I.–III.

COMPOSITION.

In Greek, Latin, and English Prose.*

HISTORY AND GEOGRAPHY.

Grecian History, to the Death of Alexander.†
Roman History, to the Accession of Augustus.‡
Outlines of Ancient and Modern Geography.§

SCIENCE SCHOLARSHIPS, FIRST YEAR.

MATHEMATICS.

Arithmetic :—

Including Vulgar and Decimal Fractions, the Rule of Three, Simple Interest, and the Extraction of the Square Root.

Algebra :—

Including the Solution of Simple and Quadratic Equations; Arithmetical and Geometrical Progressions; Permutations and Combinations; the Binomial Theorem; the nature of Logarithms.

Geometry :—

Euclid, Books I., II., III., IV., and VI., with definitions of Book V.

Plane Trigonometry :—

So far as to include the Solution of Triangles.

The use of Logarithmic and Trigonometrical Tables.

LITERARY SCHOLARSHIPS, SECOND YEAR.

THE GREEK LANGUAGE.

Homer—Iliad, Books VI.–XI.
Sophocles—Philoctetes.
Thucydides—Book IV.
Euripides—Orestes.

THE LATIN LANGUAGE.

Cicero—Tusculan Disputations, Book IV.
Cicero—Letters to his brother, Quintus, Book I.
Tacitus—Annals, Book XI.
Terence—Andria.
Horace—Odes, Books I. and II.
Juvenal—Satires III., X., XIII., XIV., XV.
A piece of unprepared Latin.

THE ENGLISH LANGUAGE.

Bain's English Grammar.
Pope's Essay on Man.
Scott's Marmion.
Macaulay's Essay on Clive.

* Rev. T. K. Arnold's Introductory Works on Greek and Latin Prose Composition are recommended.
† Dr. William Smith's History of Greece is recommended.
‡ Liddell's Roman History is recommended.
§ Dr. William Smith's Handbook of Ancient Geography is recommended.

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Appendix, No. 1.

MODERN LANGUAGES.

French :—

Havet's French Studies.
Théâtre Français Moderne—First Series, edited by Brette, Cassal, and Karcher.
Translation from English into French.

Or, German :—

William Tell, Act I., II., and III.
Paul Heyse, Neue Novellen—Vol. I.
Translation from English into German.

HISTORY AND GEOGRAPHY.

As in the First Year.

COMPOSITION.

In Greek, Latin, and English Prose.

Science Scholarships, Second Year.

MATHEMATICS.

The Course appointed for Science Scholarships of the first year.

Algebra :—

Nature and Simple Transformations of Equations; the Solution of Cubic and Biquadratic Equations; Method of Indeterminate Co-efficients.

Geometry :—

Elements of Solid Geometry.

Trigonometry :—

Plane and Spherical.

Analytic Geometry :—

Discussion of the Equations of the Right Line and Circle.

The Professor's Lectures to the Class of the First Year.

Senior Scholarships.

The College is empowered to award Seven Scholarships, of the value of forty pounds each, by examination, to the most distinguished Students who shall have proceeded to the Degree of B.A., for proficiency in special departments of study. Of these Scholarships one is awarded for proficiency in each of the following departments :—

1. The Greek and Latin Languages, and Ancient History.
2. The Modern Languages, and Modern History.
3. Mathematics.
4. Natural Philosophy.
5. Metaphysical and Economic Science.
6. Chemistry.
7. Natural History.

I.—GREEK AND LATIN LANGUAGES, AND ANCIENT HISTORY.

The Greek Language :—

Thucydides—Book III.
Plato—Georgias.
Demosthenes—De Falsâ Legatione.
Aristophanes—The Knights.
Odyssey—Books I. to VI. inclusive.
Translation from a passage of unprepared Greek.

The Latin Language :—

Cicero—De Republicâ and De Legibus.
Virgil—Æneid, VII.–XII.
Plautus—Aulularia.
Juvenal and Persius.
Ovid—Fasti, I., II., III.
Translations from unprepared Latin.
Composition in Greek and Latin Prose.

Ancient History :—

Curtius' History of Greece, translated by Ward.
Mommsen's Roman History, Chapters on Constitution.

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II.—MODERN LANGUAGES AND MODERN HISTORY.

The English Language :—

Max Müller's Lectures on the Science of Language—First Series.
Whewell's History of the Inductive Sciences—Books IV., XIV., XVI.
Shakespeare—Macbeth.
Pope—Moral Essays.

The French Language:—

Théâtre Français Moderne, with the Notes—Second and Third Series, edited by Brette, Cassal, and Karcher.
Molière—Le Tartuffe.
Geruzez—Histoire de la Littérature Française—Vol. II.
Meissner—Palaestra Gallica.
Translation from English into French.

The German Language :—

Schiller—Wallenstein's Tod.
Göthe—Wahrheit und Dichtung—Books I. and II.
Weber—History of German Literature, pages 71–94, 101–110.
Translation from English into German.

Modern History :—

Hallam's Middle Ages, Chap. I. (last edition, with the notes).
Lingard—History of England, from the Norman Conquest to the accession of Henry IV.

III.—MATHEMATICS.

The Mathematical Course appointed for the Science Scholarship of the second year; theory of Algebraical Equations, including their numerical solution; Analytic Geometry of two and of three dimensions; Differential and Integral Calculus, including its application to Geometry.

IV.—NATURAL PHILOSOPHY.

Todhunter's Statics.
Tait and Steele's Dynamics, and Routh's Dynamics of a Rigid body.
Walton's Hydrostatical Problems.
Parkinson's Optics.
Hymer's Astronomy.
Jamin's Traité de Physique.
Lloyd's Lectures on the Wave Theory of Light.
The Professor's Lectures to the Honor Class of the Third Year.

V.—METAPHYSICAL AND ECONOMIC SCIENCE.

Metaphysics :—

Descartes—Meditationes de Prima Philosophia.
Sir William Hamilton—Lectures on Metaphysics, Vol. II.
Mill—Examination of Sir William Hamilton's Philosophy. Lectures XVII. to XXIII., both inclusive.
Webb—Intellectualism of Locke.

Jurisprudence :—

Jurisprudence as treated in the Professor's Lectures.
Austin's Jurisprudence.
Maine's Ancient Law.
Modern Roman Law by Tomkins and Jenckens.

Political Economy :—

Political Economy as treated in the Professor's Lectures.
Mill's Principles of Political Economy.
Ricardo's Political Economy, chapters VII. to XVI.
Senior's Political Economy.
Cairnes' Logical Method of Political Economy.
Göschen's Foreign Exchanges.
Price's Currency.

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Appendix, No. 1.

VI.—CHEMISTRY.

Theeretical Chemistry:—

Miller's Element of Chemistry (third edition).
Wurtz' Introduction to Chemical Philosophy.
Hoffman's Modern Chemistry.
Watt's Dictionary of Chemistry.
Fownes' Chemistry (tenth edition).

Practical Chemistry:—

Analysis, and an acquaintance with Manipulation to the extent to which it is carried out in the *Practical Course* prescribed for Medical Students will be considered the minimum. (Bowman's Introduction to Practical Chemistry is recommended.)

VII.—NATURAL HISTORY.

Henfrey's Botany (second edition).
Rolleston's Animal Forms.
Dallas's Animal Kingdom; Nickolson's Zoology.
Whewell's Philosophy of the Inductive Sciences, Vol. I., Book VII., chap. i., Book VIII., chaps. i., ii., iv., Book IX., chap. vi.
Whewell's History of the Inductive Sciences, Vol. III., Books XVI., XVII.
Practical Examinations in Botany and Zoology.

PRACTICAL COURSE FOR COMMERCIAL AND GENERAL PURSUITS.

In order te extend the advantages of higher educatien te youths intended fer cemmercial and general pursuits, tho Senate has resolved to institute special courses of instruction, and te grant Diplomas, conferring the title of Licentiate in Arts, under the following conditions:—

1. To have matriculated in one of the Colleges of the Queen's University.
2. To have pursued, in one of the Colleges of the Queen's University, the course herein prescribed.
3. To have passed the University Examination herein prescribed.

The studies fer the Diplema of Licentiate in Arts extend over two Sessions, and comprise attendance on the fellewing Curriculum:—

First Session.

Two Languages, of which one may be English.*
Mathematics.
Another Course on any subject in the annexed list.

Second Session.

Greek, Latin, or a Modern Continental Language.
Logic (one Term).
Natural Philosophy.
And two other Courses on subjects in the annexed list.

If any of the ceurses, except that on Logic, extend over one term enly, some other cenrse frem the annexed list must be attended as a supplement te it, but not necessarily in the same Session.

Credit will net be given fer attending the same course ef Lectures a second time.

Attendance en the ceurses is, in all cases, understood to include passing such Examinations as the College Council shall appoint, and the catechetical parts of the courses of Lectures.

Candidates for the Diploma of Licentiate in Arts must reside at their respective Celleges during at least the first twe terms ef each Session.

After having completed the above curriculum, each Candidate for the Diploma is required to pass a University Examination in either Greek, Latin, er a Medern Continental Language; in Mathematical Science;

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and in two other subjects which he is allowed to select from the annexed list, viz.:— *Appendix, No. 1.*

The Mathematical Sciences.	The Modern Continental Languages.
The Experimental Sciences.	Greek.
The Natural Sciences.	Latin.
Geometrical Drawing.	Logic.
Mensuration, Levelling, and Mapping.	Metaphysics.
Anatomy and Physiology.	History.
English Language and Literature.	Political Economy.

English Composition forms a part of all University Examinations.

Licentiates in Arts who may desire to proceed to the Degree of Bachelor in Arts, may enter directly on the second Session in the course for this Degree, provided they attend in it, instead of the usual curriculum, all the courses prescribed for the first two years which they shall not have already attended in the curriculum for the Diploma of Licentiate.

In compliance with the first of the above specified conditions, the Council of the Queen's College, Galway, has instituted the following course for the Matriculation Examination :—

MATHEMATICS.

Arithmetic—Including Vulgar and Decimal Fractions, the Rule of Three, Simple Interest, and the Extraction of the Square Root.
Algebra—Including Fractions, Proportion, and the Solution of Simple Equations.
Geometry—Euclid, Books I., II.

GEOGRAPHY AND THE ENGLISH LANGUAGE.

Geography—Ancient and Modern, Outlines of.
Grammar—English Grammar and Composition.

The Council will confer two Exhibitions—one of the value of £16, and one of the value of £12—on the best answerers in the Course for Matriculation, should their answering be found to deserve such a reward.

Candidates for Exhibitions shall be allowed to offer, in addition to the subjects of the ordinary Matriculation Examination, one or two, but not more, of the following subjects :—

Latin, French, German, Chemistry, Natural Philosophy, Natural History; these subjects to be of equal value with the ordinary subjects, and with each other.

No Student who has held a Scholarship or Exhibition in any of the existing Faculties or Schools shall be admitted a Candidate for these Exhibitions.

FACULTY OF LAW.

Diploma of Elementary Law.

Candidates for the Diploma of Elementary Law are required to pass a matriculation Examination in the following subjects :—

GREEK.

Xenophon—Anabasis, Book I.
Grammar.

LATIN.

One of the following authors :—

Cæsar—Gallic War, Book V.
Virgil—Æneid, Book I.
Retranslation from English into Latin of portions of Cæsar.

HISTORY AND THE ENGLISH LANGUAGE.

History—Outlines of Grecian and Roman History.
Geography—Outlines of Ancient and Modern Geography.
English—English Grammar and Composition.

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Appendix, No. 1.

MATHEMATICS.

Arithmetic—including Vulgar and Decimal Fractions, the Rule of Three, Simple Interest, and the Extraction of the Square Root.
Algebra—including Fractions, Proportion, and the Solution of Simple Equations.
Geometry—Euclid, Books I., II.

Students who have passed the Matriculation Examination, and have pursued, during three years, the following courses of study, are admitted to Examination for the Diploma of Elementary Law:—

FIRST YEAR.

The Law of Property, and the Principles of Conveyancing.
Jurisprudence.

SECOND YEAR.

Equity and Bankruptcy.
Civil Law.

THIRD YEAR.

Common and Criminal Law.

Candidates who shall have passed the First and Second Sessions of the curriculum for the Degree of B.A., before entering on their legal studies, will be admitted to the Examination for the Diploma after attending a two years' curriculum in Law, if recommended by the Council of their College. Other Candidates shall attend Law Courses for three Sessions before presenting themselves.

JUNIOR SCHOLARSHIPS IN LAW.

Of the three Junior Scholarships appropriated to the Faculty of Law, one is awarded to a Student of the First Year, one to a Student of the Second Year, and one to a Student of the Third Year.

SUBJECTS OF EXAMINATION.—FIRST YEAR.

LAW OF PROPERTY, &c.

Williams' Real Property.

JURISPRUDENCE AND CIVIL LAW.

Review of Austin's Jurisprudence, by J. S. Mill (*Edinburgh Review*, October, 1863; or Mill's Dissertations and Essays, Vol. III.)
Maine's Ancient Law, Chaps. I., II., III., V., IX.
Sandars' Institutes of Justinian, Introduction.

SECOND YEAR.

All the business of the preceding Session.

EQUITY.

Smith's Manual of Equity Jurisprudence.

LAW OF PROPERTY, &c.

Williams' Personal Property; Smith's Lectures on the Law of Contracts.

JURISPRUDENCE AND CIVIL LAW.

The same as the course for the first year, together with
Jurisprudence as treated in the Professor's Lectures.
Austin's Jurisprudence, Vol. I., third edition.
Sandars' Justinian, Books I. and II.
Maine's Ancient Law.

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THIRD YEAR.

All the business of the two preceding Sessions.

LAW.

Broom's Commentaries on the Common Law, Books II., III., and IV.
White and Tador's Leading Cases in Equity, Vol. I.

JURISPRUDENCE AND CIVIL LAW.

The same as the course for the second year, together with

Jurisprudence as treated in the Professor's Lectures.
The remainder of Austin's Jurisprudence.
The remainder of Sandars' Justinian.
Modern Roman Law by Tomkins and Jenckins.

THE DEGREES OF LL.B. AND LL.D.

Candidates for the Degree of LL.B. are admitted to Examination for that Degree from the Queen's University in Ireland, one year after they have obtained the Degree of B.A., and completed the above curriculum for the Diploma in Elementary Law.

Candidates for the Degree of LL.D. are admitted to Examination for that Degree from the Queen's University in Ireland, at the expiration of two years after they have obtained the Degree of LL.B.

SENIOR SCHOLARSHIP.

The College is empowered to award one Scholarship of the value of forty pounds, by Examination, to the most distinguished Student who shall have proceeded to the Degree of B.A., and who shall have completed the Course of legal study prescribed to candidates for the Degree of LL.B. The following is the course prescribed for Examination:—

JURISPRUDENCE AND CIVIL LAW.

The same as the course in these subjects for the third year's Scholarship, together with

Spence's Equitable Jurisdiction of the Court of Chancery, part I.

PRINCIPLES OF CONSTITUTIONAL AND INTERNATIONAL LAW.

Hallam's Constitutional History of England; Kent's "Lectures on International Law" (prefixed to his "Commentaries"); Letters of "Historicus."

ENGLISH LAW.

All the business of the preceding Sessions, together with

Jarman on Wills; Sugden on Powers; Taylor on Evidence.

PRIVILEGES OF LAW STUDENTS.

By the recent regulations of the Benchers of the King's Inns, candidates for the Bar who attend the Law Lectures in the Queen's Colleges, possess the same privileges as Students who attend the Lectures in Trinity College, Dublin.

Students intending to proceed for the Certificate of the Law Professors, so as to entitle them to serve an apprenticeship of *four* years instead of *five*, under the provisions of *an Act for amending the several Acts for the Regulations of Attorneys and Solicitors* (14 and 15 Vict., cap. 88), are required to enter their names with the Registrar, *either as Matriculated or Non-Matriculated* Students, and pay the necessary College and Class Fees to the Bursar before the commencement of the Law Lectures in each Session.

Such Students are required to attend all the Lectures and pass all the Examinations prescribed for the first and second years of the course of study for candidates for the Diploma of Elementary Law.

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Appendix, No. 1.

FACULTY OF MEDICINE.

Degrees of M.D. and M.Ch.

Each Candidate for the Degree of Doctor in Medicine, or Master in Surgery, is required—

1. To have passed in one of the Colleges of the Queen's University the Entrance Examination in Arts, and to have been admitted a Matriculated Student of the University.
2. To have attended in one of the Queen's Colleges, Lectures on one Modern Continental Language for six months, and Lectures on Natural Philosophy for six months.
3. To have also attended, in some one of the Queen's Colleges, at least two of the courses of Lectures marked with an asterisk in the following list. For the remainder of the courses, authenticated certificates will be received from the Professors or Lecturers in Universities, Colleges, or Schools, recognised by the Senate of the Queen's University in Ireland.
4. To pass two University Examinations—the First University Examination and the Degree Examination.

The curriculum shall extend over at least four years, and shall be divided into periods of at least two years each.

Candidates are recommended to pass the Matriculation Examination, prior to entering on the second period.

It is recommended that the first period shall comprise attendance on the following courses of medical lectures :—

*Chemistry.
*Botany with Herborizations for practical study, and Zoology.
*Anatomy and Physiology.
*Practical Anatomy.
*Materia Medica and Pharmacy.

And that the second period shall comprise attendance on the following courses of medical lectures :—

Anatomy and Physiology (*second course*).
Practical Anatomy (*second course*).
*Theory and Practice of Surgery.
*Midwifery.
*Theory and Practice of Medicine.
*Medical Jurisprudence.

In addition to the above courses of lectures, candidates shall have attended, during either the first or second period—

A Modern Continental Language (in one of the Colleges of the University).
Experimental Physics (in one of the Colleges of the University).

Also, during the first period—

Practical Chemistry (in a recognised Laboratory).
Medico-Chirurgical Hospital (recognised by the Senate), containing at least sixty beds; together with the clinical lectures therein delivered, at least two each week—a winter session of six months.

And during the second period—

Practical Midwifery, at a recognised Midwifery Hospital, with the clinical lectures therein delivered, for a period of three months; or a Midwifery Dispensary for the same period; or ten cases of Labour under the superintendence of the Medical Officer of any hospital or dispensary where cases of labour are treated.
Medico-Chirurgical Hospital (recognised by the Senate), containing at least sixty beds; together with the clinical lectures therein delivered—eighteen months; including either three winter sessions of six months each, or two winter sessions of six months each, and two summer sessions of three months each.

Medical Examinations are held in June, and in September and October.

The June Examinations are Pass Examinations, and commence on the Friday preceding the second Saturday in June.

The Honor Examinations commence on the last Tuesday in September, and are followed by Pass Examinations.

Each candidate for examination in June must forward to the Secretary, on or before the first of June, notice of his intention to offer himself as a candidate, along with his certificates; and each candidate for examination in September or October must forward similar notice, along with his certificates, on or before the first of September.

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THE FIRST UNIVERSITY EXAMINATION IN MEDICINE.

The First University Examination may be passed either in June or September.

It is competent for Students to present themselves for the First University Examination at the termination of the first period of the curriculum, or at any subsequent period.

Before being admitted to examination, each candidate must produce satisfactory evidence of having completed the course recommended for study during the first period of the curriculum.

The First University Examination comprises the subjects recommended for study during the first period of the curriculum, along with which any Candidate may present himself for examination in Experimental Physics and Modern Languages, if he have already attended in one of the Queen's Colleges the prescribed courses on these subjects.

The portions of Zoology to be prepared are—

a. The general characters of the classes of the Animal Kingdom.
b. The first principles of Animal Physiology.
c. The comparative Anatomy and Classification of either the *Vertebrate* or the *Invertebrate* Animals—whichever is selected by the candidate.
d. A special practical knowledge of the leading characters and classification of either some one Vertebrate class, or some one Invertebrate sub-kingdom.

In Botany Candidates will be examined in the general principles of Vegetable Structure and Organography. They will also be expected to possess a practical acquaintance with the characters of the following natural orders, viz. :—Ranunculaceæ, Cruciferæ, Rosaceæ, Leguminosæ, Umbelliferæ, Compositæ, Solanaceæ, Labiatæ, Euphorbiaceæ, Amentiferæ, Coniferæ, Aroideæ, Orchideæ, Scrophulariaceæ, Boraginaceæ, Liliaceæ, and Gramineæ.

Henfrey's Elementary Course of Botany is recommended as the Text-Book.

English Composition forms a part of all University Examinations.

Competitors for Honors will be examined in all the subjects of the First University Examination, including Experimental Physics and Modern Languages.

Two Exhibitions, one consisting of two instalments of £20 each, the other of two instalments of £15 each, will be awarded to the best answerers at the Honor Examinations, if they be recommended by the Examiners as possessed of sufficient absolute merit. Further regulations regarding these Exhibitions will be found in p. 44.

The candidates who pass with Honors will be arranged in three classes.

Candidates who postpone passing their First Medical Examination until they present themselves at the Degree Examination are not eligible for Honors with the First Examination.

Both Honor and Pass Examinations will be held in September. The Examination held in June is a Pass Examination.

DEGREE EXAMINATIONS IN MEDICINE.

Examinations for the Degrees of M.D. and M.Ch. will be held in June and September.

The Fee for each Degree is Five Pounds, and must be lodged with the Secretary before the Examination begins.

Each Candidate must be recommended by the President of his College, and produce certificates to the following effect:—

1. A certificate from the Secretary of the Queen's University, that he has passed the Previous Examination, unless the candidate present himself for both Examinations simultaneously.

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2. From the Council of his College, that he has passed a full Examination in the subjects of study prescribed in the entrance Course of the Faculty of Arts, and has been admitted a Matriculated Student in the Faculty of Medicine.

3. That he has attended in the Colleges of the Queen's University two of the courses marked with an asterisk on p. 34, lectures on one Modern Language, and lectures on Experimental Physics.

4. Certificates that he has completed all other prescribed courses.

The Examination for the Degree of M.D. comprises the subjects recommended for study during the second period of medical education, along with Experimental Physics and one Modern Language, unless an Examination in these subjects shall have been already passed at the First University Examination.

The Examination for the Degree of M.Ch. comprises in addition an Examination in Operative Surgery.*

Candidates who graduate with Honors will be arranged in three classes. Candidates who take a First Class will receive a Medal and Prize. Candidates who take a Second Class will receive a Prize. Candidates who take a Third Class will receive a Certificate of Honor.

The Examination for the Degree with Honors will commence on the last Tuesday in September, and will be followed by the Examination of those candidates who seek to graduate without Honors.

The Examination held in June is a Pass Examination.

Matriculation.

Candidates for the Degree of M.D. in the Queen's University are required to pass a Matriculation Examination in the following subjects :—

GREEK.

Xenophon—The Anabasis, Book I.
Grammar.

LATIN.

One of the following authors :—

Virgil—Æneid, Book I.
Cæsar—Gallic War, Book V.
Retranslation from English into Latin of portions of Cæsar.

ENGLISH.

Grammar and Composition.

MATHEMATICS.

Aritbmetic and Algebra :—

The First four Rules of Arithmetic; Vulgar and Decimal Fractions; the Rule of Three; Addition, Subtraction, Multiplication, and Division of Algebraical Quantities Simple Equations.

Geometry :—

Euclid, Books I. and II.

HISTORY AND GEOGRAPHY.

History :—

Outlines of Grecian and Roman History.

Geography :—

Outlines of Ancient and Modern Geography.†

* Candidates for the Degree of Master in Surgery, who obtained the Degree of M.D. in this University before the 1st of January, 1865, will be exempted from the Examination in Operative Surgery.

† Rev. T. K. Arnold's Handbooks are recommended.

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DAYS AND HOURS OF LECTURES.

	Subjects.	Months.	Mon.	Tues.	Wed.	Thurs.	Friday.	Sat.
1st Period.	French,	VI.	10	4	10	10	.	12
	German,	VI.	.	2	.	2	.	.
	Botany and Zoology,	VI.	.	11	.	11	.	11
	Experimental Physics,	VI.	.	12	.	12	.	.
	Chemistry,	VI.	12	.	12	.	12	12
	Logic,		1	.	1	.	1	.
	Anatomy and Physiology,		3	3	3	3	3	.
	Practical Anatomy,		1	1	1	1	1	.
	Practical Chemistry,		2	.	2	.	2	.
	Materia Medica,		4	.	4	.	4	.
2nd Period.	Practical Anatomy,		1	1	1	1	1	.
	Anatomy and Physiology,		3	3	3	3	3	.
	Surgery,		11	.	11	.	11	.
	Midwifery,		2	.	2	.	2	1
	Medicine,		.	2	.	2	.	2
	Medical Jurisprudence,		.	4	.	4	.	4

The lectures of the Professors are fully recognised by the Queen's University, the Universities of Dublin, London, Oxford, Glasgow, Durham; the University and King's College, Aberdeen; the College of Physicians, London; the Royal Colleges of Surgeons in Ireland, England, and Scotland; the Faculty of Physicians and Surgeons, Glasgow; the Apothecaries' Halls of Dublin and London; the Army, Navy, and East India Medical Boards.*

SCHOLARSHIPS.

Eight Junior Scholarships are appropriated to the Faculty of Medicine of the value of £25 each. Of these—

Two are allotted to Students of the First Year.
Two " " Second Year.
Two " " Third Year.
Two " " Fourth Year.

REGULATIONS RESPECTING MEDICAL SCHOLARSHIPS AND EXHIBITIONS.

(Scholars are required to pay only one-half of the ordinary class fee for each obligatory course of lectures.)

All Scholars and Exhibitioners are required to pass the Sessional Examination.

FIRST YEAR'S SCHOLARSHIPS.

All Students who have passed the Matriculation Examination may compete for the Scholarships of the first year.

For the one Scholarship the Examination will embrace the course prescribed for the Literary Scholarships of the first year, in the Faculty of Arts.

* Opportunities for Hospital attendance and Clinical Instruction are afforded to Students in the County Infirmary and Town Hospitals, which are in the immediate vicinity of the College. These Hospitals are open to Students every morning, and Clinical Lectures are delivered by the medical officers. All communications respecting the Hospitals should be addressed to the Secretary of the Clinical Board, to whom the fee of £4 is payable. Certificates of attendance on the Galway Hospitals and Clinical Lectures are accepted by the several other licensing bodies in the United Kingdom as well as by the Queen's University.

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For the other Scholarship the course prescribed for Science Scholarships of the first year in the Faculty of Arts.

If at either of these Examinations a competent candidate do not present himself, the Scholarship assigned to that department may be awarded to the other department, if there be in the latter a second candidate duly qualified.

A Student to whom a Scholarship of the first year has been awarded, shall attend the following courses :—

A Modern Language.
Natural Philosophy.
Anatomy.
Chemistry.
Botany and Zoology.

SECOND YEAR'S SCHOLARSHIPS.

To be allowed to compete for a Scholarship of the second year, a Student must be of not more than one year's standing in some school recognised by the Senate of the Queen's University.

A Candidate may select for the subjects of his Examination any four of the following subjects, of which Practical Anatomy must be one. The number placed opposite each subject in the following list shall be the standard mark, and no mark under 100 shall be taken into account in any subject :—

Practical Anatomy,	1,000
Anatomy and Physiology,	1,000
Chemistry,	1,000
Botany,	500
Zoology,	500
A Modern Language,	500
Natural Philosophy,	500

SUBJECTS OF EXAMINATION.

FRENCH.*

Miguet—Révolution Française.
Otto's French Conversational Grammar.
Translation from English into French.

GERMAN.*

Schiller—Wilhelm Tell, Acts I., II., and III.
German Grammar.

NATURAL PHILOSOPHY.—Elements of Mechanics, Hydrostatics, Pneumatics, Acoustics, Optics, Heat, Electricity, Galvanism, and Magnetism.

ZOOLOGY.—Vertebrata. Practical Examination.

BOTANY.—Structural and Physiological Botany; Principles of Classification; Characters of the Natural Orders yielding medicinal plants. Practical Examination.

ANATOMY AND PHYSIOLOGY.—Structure and Functions of the generally distributed Tissues, and of the Organs of Digestion and Urination.

PRACTICAL ANATOMY.—Osteology and Arthrology, also the Myology of the limbs.

Candidates may be examined on specimens placed before them.

CHEMISTRY.—General Principles of Chemical Philosophy; Laws of Combination by weight and volume; Atomic Theory; Nature of Salts, &c.; Chemistry of non-metallic bodies; Chemistry of Metals; Organic Chemistry.

* The candidate may select either French or German.

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A Student to whom a Scholarship of the second year has been awarded shall attend such of the medical courses assigned to the first period of the curriculum prescribed in the University regulations as he has not already taken. He shall also take a course of Modern Langnages and of Natural Philosophy, if he have not previonsly done so in a Queen's College.

Third Year's Scholarships.

To be allowed to compete for a Scholarship of the third year, a Student must have attended, in some medical school recognised by the Senate of the Queen's University, four of the following courses :—

Anatomy and Physiology.	Practical Chemistry.
Chemistry.	Practical Anatomy.
Botany.	Materia Medica.
Zoology.	

And must not be of more than two years' standing.

The Examination shall include the following subjects. The number placed opposite each subject in the following list shall be the standard mark ; and no mark under 300 in any one shall be taken into account :—

Anatomy and Physiology,	1,000
Practical Anatomy,	1,000
Materia Medica and Therapeutics,	1,000
Practical Chemistry,	1,000

Subjects of Examination.

Anatomy and Physiology. — Organs and Functions of Digestion, Absorption, Circulation, Respiration, and Urination.

Practical Anatomy.—Joints, Muscles, Vessels, Viscera, and Brain.

During the Examination, Candidates may be called on to describe structures placed before them.

Materia Medica.—Tonics, Alkaloids, Cathartics, Diuretics, Narcotics. Symptoms indicating their unhealthy action, and treatment to counteract such action.

Practical Chemistry.—As taught in the class.

A Student to whom a third year's Scholarship has been awarded, shall attend, during the year of his election, four at least of the courses prescribed for the second period in the University regulations.

Fourth Year's Scholarships.

To be allowed to compete for a Scholarship of the fourth year, the candidate must have attended, in some school recognised by the Senate of the Queen's University, all the strictly professional courses of the first period, and must have attended three at least of those of the second period prescribed in the regulations of the Queen's University, and must not be of more than three years' standing.

A candidate for fourth year's Scholarship may choose any four of the following subjects as those in which he shall be examined, provided Anatomy and Physiology be one, and that he have attended lectures on the other three. The number assigned to each subject in the following list shall be the standard mark, and no mark under 300 shall be taken into account :—

Anatomy and Physiology,	1,000
Theory and Practice of Surgery,	1,000
Midwifery and Diseases of Women and Children,	1,000
Theory and Practice of Medicine,	1,000
Medical Jurisprudence,	1,000
Materia Medica,	1,000

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SUBJECTS OF EXAMINATION.

THERAPEUTICS AND PATHOLOGY.—1. Candidates must be prepared to answer in any part of the previous course of lectures in Materia Medica: Poisonone actions of Medicaments; their symptoms and tests. They will also be required to write prescriptions in proper form on given subjects.

2. Diseases of the Brain and Nervous System.

3. Diseases of Joints; Aneurism.

4. Human Fœtus and its involucra; abortion; diseases of parturient women; diseases of childhood.

A Student to whom a Scholarship of the fourth year has been awarded shall attend during the year of his election two at least of the practical courses prescribed for the second period in the University regulations; and if more courses are required to complete the curriculum, both as to professional and non-professional subjects, he shall also attend them.

NON-MATRICULATED STUDENTS.

Any course or courses of lectures may be attended by Non-Matriculated Students, without passing any examination, on paying the regulated class fee to each Professor whose lectures they attend. Such Students are admissible to the Library on payment of a fee of Five Shillings for the year.

SCHOOL OF CIVIL ENGINEERING.

Candidates for the Diploma in Civil Engineering are required:—

1. To have been admitted Matriculated Students of one of the Colleges of the Queen's University in the Department of Civil Engineering
2. To have studied in the Colleges of the Queen's University the course herein prescribed.
3. To have passed two University Examinations.

Candidates for Matriculation are examined in the following subjects:—

MATHEMATICS.

Arithmetic:—

Including Vulgar and Decimal Fractions, the Rule of Three, Simple Interest, and the Extraction of the Square Root.

Algebra:—

Including Fractions, Proportion, and the Solution of Simple Equations.

Geometry:—

Euclid, Books I., II., III., VI., with Definitions of Book V.

HISTORY, GEOGRAPHY, AND THE ENGLISH LANGUAGE.

History:—

Outlines of Ancient History.

Geography:—

Outlines of Ancient and Modern Geography.

English:—

English Grammar and Composition.

The course for the Diploma in Civil Engineering usually extends over three Sessions, and comprises attendance on the following curriculum:—

FIRST SESSION.

Mathematics (first course).
Chemistry.
A Modern Language.
Geometrical Drawing.
Office Work.

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SECOND SESSION

Mathematics (second course).
Mathematical Physics.
Experimental Physics.
Civil Engineering.
Office Work.
Field Work.

THIRD SESSION.

Natural Philosophy (applied).
Civil and Mechanical Engineering.
Mineralogy, Geology, and Physical Geography.
Office Work.
Field Work.
Engineering Excursions.

Attendance on these courses in all cases includes passing such Examinations as may be appointed by the College Council, as well as the catechetical parts of the courses of lectures.

Engineering Students must reside at their respective Colleges during at least the first two Terms of each Session, and can be exempted from residence during the third Term also, only by a special grace of the College Council.

The study of the Engineering Curriculum may be extended over more than three Sessions, on the recommendation of the College Council, and under such regulations as the Council shall impose. Some relaxation of the order in which the subjects shall be studied will be admitted, on the recommendation of the Council.

Candidates will, on the special recommendation of the College Council, be admitted to the Diploma after two years' residence instead of three, if their previous acquaintance with a sufficient group of the subjects above set down for study in the first and second Sessions is deemed by the Council satisfactory. In such cases the certificate of the Council will be accepted in lieu of attendance upon these courses, but will not exempt candidates from the University Examinations in them.

Candidates for the Diploma in Civil Engineering are required to pass two University Examinations,—the First University Examination and the Diploma Examination, both of which are held in the Hall of the University in Dublin.

Students who have completed their second Session must attempt the First University Examination before rising to the third year, unless prevented by illness or other inevitable accident, in which case the Senate may admit them to a Supplementary Examination.

Candidates who have attempted, but failed to pass, the First University Examination in October, will be admitted to a Supplementary Examination.

First University Examination in Engineering.

The course for the First University Examination includes French; Geometrical Drawing; Mathematics (first course); Mathematics (second course); Mensuration, Levelling, and Mapping; Experimental Physics.

Each candidate must forward to the Secretary, on or before the 1st of October, notice of his intention to offer himself as a candidate, and will thereupon receive intimation of the days upon which his Examination will be held.

The candidates who pass with Honors will be arranged in three classes, the names in each class being placed alphabetically.

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Two Exhibitions, one of the annual value of £20 for two years, the other of the annual value of £15 for two years, will be competed for at the Honor Examination. For the regulations regarding these Exhibitions see p. 45.

EXAMINATION FOR THE DIPLOMA IN CIVIL ENGINEERING.

The Examination for the Diploma in Civil Engineering will embrace the following course:—Engineering, in all its branches; Mensuration, Levelling and Mapping; Mathematical Physics; Natural Philosophy, applied; Chemistry; Mineralogy, Geology, and Physical Geography. Each candidate will also be required to produce at this Examination the Field-notes and Drawings of a Survey made by him.

Candidates who have completed the Engineering Course may present themselves as candidates for the Diploma, either with Honors or without Honors.

The Examinations for the Diploma in Civil Engineering will commence on the last Tuesday in September, and end on the second Tuesday in October. The Honor Examination will precede the Pass.

Each Candidate must forward to the Secretary, on or before the 1st of September, notice of his intention to offer himself as a candidate, and will thereupon receive intimation of the days upon which his Examination will be held.

The candidates who pass with Honors will be arranged in three classes; the names in each class will be placed alphabetically.

Candidates who take a First Class will receive a Medal and Prize.

Candidates who take a Second Class will receive a Prize.

Candidates who take a Third Class will receive a Certificate of Honor.

Candidates are recommended to provide themselves with drawing instruments and materials, viz.:—a T square; pair of set squares; pair of compasses, with pen and pencil legs; drawing-pen; 12-inch scale, divided on one edge decimally to two chains to an inch, and on the other side, duodecimally to five feet to an inch; an offset scale 20 and 40; also pencils, papers, colours, &c.

DAYS AND HOURS OF LECTURES.

	Subjects.	Terms.	Mon.	Tues.	Wed.	Thurs.	Friday.	Sat.
1st Year	French,	1, 2, 3,	10	.	10	10	.	.
	Chemistry,	1, 2, 3,	12	.	12	.	12	.
	Mathematics (pass),	1, 2, 3,	1	.	1	.	1	.
	Mathematics (honor),	1, 2, 3,	.	1	.	1	.	.
	Geometrical Drawing,	1, 2, 3,	11	.	11	.	11	.
	Office Work,	1, 2, 3,	2	.	2	.	2	.
2nd Year	Civil Engineering,	1, 2, 3,	1	.	1	.	1	.
	Office Work,	1, 2, 3,	2	.	2	.	2	.
	Mathematical Physics (pass),	.	12	.	12	.	.	.
	Experimental Physics (pass),	1, 2, 3,	.	12	.	12	.	.
	Experimental Physics (honor),	1, 2, 3,	11	.	11	.	.	.
	Mathematical Physics (honor),	1, 2, 3,	.	2	.	2	.	.
	Mathematics (honor),	1, 2, 3,	12	.	12	.	12	.
	Mathematics (pass),	1, 2, 3,	.	1	.	1	.	.
3rd Year	Geology and Mineralogy,	1, 2, 3,	1	.	1	.	1	.
	Civil Engineering,	1, 2, 3,	12	.	12	.	12	.
	Office Work,	1, 2, 3,	2	.	2	.	2	.
	Natural Philosophy (applied),	1, 2, 3,	.	11	.	.	.	11

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SCHOLARSHIPS. *Appendix, No. 1.*

Of the five Scholarships appropriated to the Department of Engineering, two are awarded to Students of the first year, two to Students of the second year, and one to a Student of the third year.

SUBJECTS OF EXAMINATION—FIRST YEAR.

The course prescribed for Science Scholarship of the first year.

For this course, see p. 27.

SECOND YEAR.

The course of Elementary Mathematics prescribed for the Science Scholarship of the second year, together with the courses of Chemistry, Modern Languages as prescribed for Literary Scholarship of second year, Office Work, and Geometrical Drawing prescribed in the course for Students in Engineering of the first year.

THIRD YEAR.

The courses of Mathematics, Mathematical and Experimental Physics, Mineralogy and Geology, Engineering and Office Work, prescribed to Honor Students of the second year.

INDIAN ENGINEERING ESTABLISHMENT.

The following notice has been issued by order of the Secretary of State for India, in Council:—

"India Office, September 27th, 1871.

"Notice is hereby given that appointments to the Indian Public Works Department, of Assistant Engineer, second grade, salary, 4,200 rs. (about £420) per annum, will be available in 1874 for such Candidates as may be found duly qualified."

APPENDIX.

PRIZES FOUNDED BY PUBLIC SUBSCRIPTION.

At a public meeting of the University in October, 1861, Sir Robert Peel offered the sum of £1,200 to found three exhibitions* of £40 each, to be competed for annually for ten years; and he expressed his desire that these prizes should be tenable along with the small Scholarships attached to the Queen's Colleges, in order that his benefaction might have the effect of increasing the value of the rewards provided for the most deserving students.

When announcing this munificent gift, Sir Robert Peel invited others to co-operate with him in thus endeavouring to promote United Education, without adding to the burden on the public purse; and his invitation met with so ready a response, that it became necessary to form a Committee, which should take charge of the subscriptions, and make regulations for the proper allocation of the funds. This Committee consisted of Sir Robert Peel, Bart., M.P. (*Chairman*); the Duke of Leinster; the Lord Talbot de Malahide, F.R.S.; the Right Honorable Abraham Brewster, M.A., Q.C.; Sir James Emerson Tennent, LL.D.; James Naper, D.L.; Alexander Thom, Esq.; Sir Benjamin Lee Guinness, Bart.; William Malcomson, Esq.; and G. Johnstone Stoney, M.A., F.R.S. (*Honorary Secretary*).

* This allocation was afterwards changed, and Sir Robert Peel's benefaction merged in the general fund, in order that it might aid in establishing the connected series of prizes which the support of the public has enabled the Committee to found.

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Prizes which have been founded.

This munificence on the part of the public has enabled the Committee to found the following prizes, to be competed for annually for ten years; and to place at interest a considerable sum,* which will accumulate and form the nucleus of a fund for continuing these most useful aids to learning beyond that time.

Exhibitions in the Faculty of Arts.

Three exhibitions of £20 a year for three years, three exhibitions of £15 a year for three years, and two exhibitions of £10 a year for three years, will be competed for annually in the Faculty of Arts. The three £20 exhibitions will be awarded to the candidates who stand foremost in order of merit from each College at the First University Examination in Arts; and the three £15 exhibitions to the candidates who stand second in order of merit from each College; provided that their names appear in the First Class of the division list at that examination. Of the two £10 exhibitions, one will be awarded to the best answerer in Mathematical Science, and the other to the best answerer in the Ancient Classics at the First University Examination. The £10 exhibitions are open to the competition of candidates from all the Colleges, and may be held along with one of the larger exhibitions.

Each candidate will be deemed a Student of that College in which he shall have attended the Lectures of the Second Session; and no Student will be admitted to the competition who shall have allowed more than a year to intervene between the time that he entered on the studies of the second year and the time of competition.

The first instalment of each exhibition will be paid at the time of competition; the second when the exhibitioner takes the Degree of B.A. in the Queen's University, provided he graduate with honors, and within two academic years; and the third when he takes the Degree of M.A. in the Queen's University, provided he obtain it within three academic years from the time of competition.

Exhibitions in the Faculty of Medicine.

Two exhibitions—one consisting of two instalments of £20 each, and the other of two instalments of £15 each—will be competed for annually in the Faculty of Medicine. These exhibitions will be awarded for proficiency in the non-professional part of the First University Examination in Medicine: the £20 exhibition to the best answerer absolutely, in whichever of the Colleges he may have been educated; and the £15 exhibition to the candidate who is first in order of merit of the competitors from the other two Colleges: provided that their names appear in the First Class of the division list at that examination.

Each candidate will be deemed a student of that College in which he shall have attended the lectures of the Second Session; and no student will be admitted to the competition who shall have allowed more than a year to intervene between the time that he entered on the studies of the second year and the time of competition.

The exhibitions in Medicine will be paid in two equal instalments: one at the time of competition; the other when the exhibitioner takes the Degree of M.D. in the Queen's University, provided that he graduate with honors, and within three academic years from the time of competition.

* £1,080 has been already invested, and the sum reserved for accumulation will probably be soon raised to £3,000. It is the intention of the Committee to add to the reserve fund whatever further sums may be at their disposal from lapsed exhibitions or other sources; as it is very important that the assistance which is now being afforded for ten years to students in the Queen's Colleges should not be allowed to come abruptly to an end at the close of that period.

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Exhibitions in the School of Engineering.

Two exhibitions—one of £20 a year for two years, and the other of £15 a year for two years—will be competed for annually in the School of Engineering. These exhibitions will be awarded at the First University Examination in Engineering: the £20 exhibition to the best answerer absolutely, in whichever of the Colleges he may have been educated; and the £15 exhibition to the candidate who is first in order of merit of the competitors from the other two Colleges: provided that their names appear in the First Class of the division list at that examination.

Each candidate will be deemed a student of that College in which he shall have attended the lectures of the Second Session; and no student will be admitted to the competition who shall have allowed more than a year to intervene between the time that he entered on the studies of the second year and the time of competition.

The first instalment of each exhibition will be paid at the time of competition; the other when the exhibitioner takes the Diploma in Engineering of the Queen's University, provided that he take honors with it, and obtain it within two academic years from the time of competition.

Prizes in Composition, open to the competition of Graduates and Undergraduates.

Two prizes for English prose composition—one of £10 worth of books, and the other of £5 worth of books—have been founded, and are open to the competition of all members of the University who shall not have been graduated for more than three years at the time of competition, and who shall not have already twice obtained one or other of these prizes.

Prizes in Composition, open to the competition of all Undergraduates.

Two prizes in composition—one for English prose, the other for Greek or Latin prose, and each consisting of £5 worth of books—have been founded, and are open to the competition of all undergraduates, provided that neither the English nor the Classical prize be awarded oftener than twice to any student.

Prize in Composition, limited to the competition of Undergraduates in Medicine.

A prize of £5 worth of books has been founded, for a thesis on a subject to be prescribed, and is limited to the competition of the undergraduates in Medicine who shall not have already twice received the prize.

The subjects on which the competitors for composition prizes are to write will be announced on or before the first of June in each year; the compositions, with fictitious signatures, are to be sent in to the Secretary of the University, on or before the first of the following September, and the successful competitors will be declared at the next public meeting of the University.

Prizes at Entrance.

Two prizes for English prose composition, and two prizes for Geometry, have been founded in each College, to be awarded annually at entrance: first prize for English prose composition, £3 worth of books; second do., £2 worth of books: first prize for Geometry, £3 worth of books; second do., £2 worth of books.

All the exhibitions and prizes now founded by public subscription shall be tenable along with any other scholarships, exhibitions, or prizes to which the successful competitors may be otherwise entitled.

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Appendix, No. 1.

Persons who wish to add to this Fund may find the following forms of use :—

FORM OF DONATION.

I enclose Pounds sterling, and desire that this sum be expended in founding Exhibitions or other Prizes to encourage learning and promote industry among the Students and Graduates of the Queen's University in Ireland.

Dated at this day of , 186

(Signed),

To the Right Honorable
Sir ROBERT PEEL, Bart.,
Chairman of the Committee for augmenting the Endowments of the Queen's Colleges.

FORM OF SUBSCRIPTION FOR A TERM OF YEARS.

I enclose as the First Instalment of my Subscription to the *Fund for the Endowment of Prizes, in connexion with the Queen's University in Ireland*, and I will cause an equal sum to be lodged in the Bank of Ireland to the credit of the same Fund, before the first of January in *each* of the next years.

Dated this day of , 186

(Signed),

To the Right Honorable
Sir ROBERT PEEL, Bart.,
Chairman of the Committee for augmenting the Endowments of the Queen's Colleges.

EXAMINATIONS FOR THE CIVIL SERVICE OF INDIA.

REGULATIONS for the OPEN COMPETITION of 1871.*

1. On Tuesday, March 28th, 1871, and following days, an examination of candidates will be held in London. At this examination not fewer than candidates will be selected, if so many shall be found daly qualified. Of these, will be selected for the Presidency of Bengal [for the Upper Provinces, and for the Lower Provinces], for that of Madras, and for that of Bombay.†—Notice will hereafter be given of the days and place of examination.

2. Any person desirous of competing at this examination, must produce to the Civil Service Commissioners, before the 1st of February, 1873, evidence showing :—

(*a.*) That he is a natural born subject of Her Majesty.

(*b.*) That his age on the 1st March, 1871, will be above seventeen years and under twenty-one years. [*N.B.—In the case of Natives of India this must be certified by the Government of India, or of the Presidency or Province in which the Candidate may have resided.*]

(*c.*) That he has no disease, constitutional affection, or bodily infirmity, unfitting him, or likely to unfit him, for the Civil Service of India.‡

(*d.*) That he is of good moral character ;

and must also, before the 1st February, 1871, pay to the said Commissioners such fee as the Secretary of State for India may prescribe.§

3. Should the evidence upon the above points be *prima fâcie* satisfactory to the Civil Service Commissioners, the Candidate will, upon

* The regulations are liable to be altered in future years.

† The number of appointments to be made, and the number in each Presidency, &c., will be announced hereafter.

‡ Evidence of health and character must bear date not earlier than the 1st January 1871.

§ The Fee for this Examination will be £5.

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payment of the prescribed fee, be admitted to the Examination. The Commissioners may, however, in their discretion, at any time prior to the grant of the Certificate of Qualification hereinafter referred to, institute such further inquiries as they may deem necessary; and if the result of such inquiries, in the case of any Candidate, should be unsatisfactory to them in any of the above respects, he will be ineligible for admission to the Civil Service of India, and if already selected, will be removed from the position of a Probationer. *Appendix, No. 1.*

4. The examination will take place only in the following branches of knowledge:—

	Marks.
English Composition,	500
History of England, including that of the Laws and Constitution,	500
English Language and Literature,	500
Language, Literature, and History of Greece,	750
" " Rome,	750
" " France,	375
" " Germany,	375
" " Italy,	375
Mathematics, Pure and Mixed,	1,250
Natural Science; that is, (1.) Chemistry, including Heat, (2.) Electricity and Magnetism, (3.) Geology and Mineralogy, (4.) Zoology, (5.) Botany,	1,000
*** The total (1,000 marks) may be obtained by adequate proficiency in any two or more of the five branches of science included under this head.	
Moral Sciences; that is, Logic, Mental and Moral Philosophy,	500
Sanskrit Language and Literature,	500
Arabic Language and Literature,	500

Candidates are at liberty to name, before February 1, 1871, any or all of these branches of knowledge. No subjects are *obligatory*.

5. The merit of the persons examined will be estimated by marks, and the number set opposite to each branch in the preceding regulation denotes the greatest number of marks that can be obtained in respect of it.

6. No candidate will be allowed any marks in respect of any subject of examination unless he shall be considered to possess a *competent knowledge* of that subject.*

7. The examination will be conducted by means of printed questions and written answers, and by *viva voce* examination, as may be deemed necessary.

8. The marks obtained by each candidate, in respect of each of the subjects in which he shall have been examined, will be added up, and the names of the candidates who shall have obtained a greater aggregate number of marks than any of the remaining candidates will be set forth in order of merit, and such candidates shall be deemed to be selected candidates for the Civil Service of India, provided they appear to be in other respects duly qualified; and shall be permitted to choose,† according to the order in which they stand, as long as a choice remains, the Presidency (and in Bengal, the division of the Presidency) to which they shall be appointed. Should any of the selected candidates become disqualified, the Secretary of State for India will determine whether the vacancy thus created shall be filled up or not. In the former case, the candidate next in order of merit and in other respects duly qualified, shall be deemed to be a selected candidate.

9. Selected candidates before proceeding to India will be on probation

* "Nothing can be further from our wish than to hold out premiums for knowledge of wide surface and of small depth. *We are of opinion that a candidate ought to be allowed no credit at all for taking up a subject in which he is a mere smatterer.*"—Report of Committee of 1854. A deduction of marks will be made under each subject, *including Mathematics.*

† This right must be exercised immediately after the result of the examination is announced, on such day as may be fixed by the Civil Service Commissioners.

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Appendix, No. 1.

for two years, during which time they will be examined periodically, with the view of testing their progress in the following subjects* :—

	Marks.
1. Oriental Languages :—	
Sanskrit, ...	500
Vernacular† Languages of India (each), . . .	400
2. The History and Geography of India, . . .	350
3. Law, ...	1,250
4. Political Economy, ...	350

In these examinations, as in the open competition, the merit of the candidates examined will be estimated by marks, and the number set opposite to each subject denotes the greatest number of marks that can be obtained in respect of it at any one examination. The examination will be conducted by means of printed questions and written answers, and by *viva voce* examination, as may be deemed necessary. The last of these examinations will be held at the close of the second year of probation, and will be called the "Final Examination," at which it will be decided whether a selected candidate is qualified for the Civil Service of India.

10. Any candidate who, at any of the periodical Examinations, shall appear to have wilfully neglected his studies, or to be physically incapacitated for pursuing the prescribed course of training, will be liable to have his name removed from the list of selected candidates.

11. The selected candidates who at the Final Examination shall be found to have a competent knowledge of the subjects specified in Regulation 9, and who shall have satisfied the Civil Service Commissioners of their eligibility in respect of age, health, and character, shall be certified by the said Commissioners to be entitled to be appointed to the Civil Service of India, provided they shall comply with the regulations in force, at the time, for that Service.

12. Applications from persons desirous to be admitted as candidates are to be addressed to the Secretary to the Civil Service Commissioners, London, S.W., from whom the proper form for the purpose may be obtained.

The Civil Service Commissioners are authorized by the Secretary of State for India in Council to make the following announcements :—

1. Selected Candidates will be permitted to choose,‡ according to the order in which they stand in the list resulting from the open competition as long as a choice remains, the Presidency (and in Bengal the Division of the Presidency) to which they shall be appointed, but this choice will be subject to a different arrangement, should the Secretary of State or Government of India deem it necessary.

2. No Candidate will be permitted to proceed to India before he shall have passed the Final Examination, and received a certificate of qualification from the Civil Service Commissioners, or after he shall have attained the age of twenty-four years.

3. The seniority in the Civil Service of India of the selected candidates shall be determined according to the order in which they stand on the list resulting from the Final Examination.

4. It is the intention of the Secretary of State to allow the sum of £50 after each of the three first half years of probation, and £150 after the last half-year, to each selected candidate who shall have passed the required Examinations to the satisfaction of the Commissioners, and shall

* Full instructions as to the course of study to be pursued will be issued to the successful candidates as soon as possible after the result of the open competition is declared.

† Including, besides the languages prescribed for the several Presidencies, such other languages as may, with the approval of the Commissioners, be taken up as subjects of examination.

‡ This choice must be exercised immediately after the result of the open competition is announced, on such day as may be fixed by the Civil Service Commissioners.

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have complied with such rules as may be laid down for the guidance of selected candidates.

5. All selected candidates will be required, after having passed the second periodical Examination, to attend at the India Office for the purpose of entering into an agreement binding themselves, amongst other things, to refund in certain cases the amount of their allowance in the event of their failing to proceed to India. For a candidate under age a surety will be required.

6. After passing the Final Examination, each candidate will be required to attend again at the India Office, with the view of entering into covenants and giving a bond for £1,000, jointly with two sureties, for the due fulfilment of the same. The stamps payable on these documents amount to £1 10*s*.

7. Candidates rejected at the Final Examination of 1873 will in no case be allowed to present themselves for re-examination.

RULES of the HONORABLE SOCIETY of KING'S INNS, with regard to the ADMISSION of STUDENTS into the SOCIETY, and to the DEGREE of BARRISTER-AT-LAW.

I.—Every person desirous to be admitted a Student into this Society shall, in order thereto, present at the Under-Treasurer's Office, three clear days at the least before the first day of term, a memorial in the printed form, No. 1, which memorial is to be signed and lodged by the Student himself, and the certificate annexed thereto, signed by a practising Barrister of at least ten years' standing.

II.—Every Student, on presenting such memorial, shall produce a certificate of having paid at the Stamp Office the stamp duty of twenty-five pounds sterling, and also pay to the Under-Treasurer the sum of twenty-one pounds ten shillings and four pence, including five pounds five shillings for admission to the King's Inns Library, and five pounds five shillings for lectures under the recent system of legal education—the balance being the ancient fee for admission into the Society as a Student. Students of the Colleges of the Queen's University who shall elect to attend the courses of lectures in those Colleges, as hereafter provided, are exempted from paying the above sum of five guineas for lectures.

III.—Every Student not a graduate of the University of Dublin, Oxford, Cambridge, Durham, London, or the Queen's University in Ireland, shall keep nine Terms' Commons in the Dining Hall of the Society, and also eight Terms' Commons in one of the Four Inns of Court in London, and shall lodge, with the Under-Treasurer, a certificate of having kept said eight Terms' Commons in one of the said Inns of Court in London, on presenting his memorial to be admitted to the degree of Barrister-at-Law.

IV.—Every such Student, if a graduate of any of the said Universities, is only required to keep six Terms' Commons in the Dining Hall of the King's Inns, and also six Terms' Commons in one of the Inns of Court in London.

V.—Every Student admitted into the Society after the first day of Trinity Term, one thousand eight hundred and fifty, if a graduate of the University of Dublin, Oxford, Cambridge, Durham, or London, or the Queen's University in Ireland, shall, as a condition precedent to being called to the Bar, produce certificates of his having attended two complete courses *at least* of lectures—viz., One complete course of lectures of any two, at his option, of the four Law Professors—namely, the Law Professors of the University of Dublin, and those of the King's Inns, and *at least* five-sixths of the lectures of each session or University term; or if a graduate in arts of the Queen's University in Ireland, shall have the option of producing certificates of having attended two complete courses, at least,

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Appendix No. 1.

of lectures of each of the two Law Professors of any College of the Queen's Universsity, comprising not less thau thirty-six lectures, and at least five-sixths of ths lectures of each course, and of having passsd ths examinations in the Collegs to which he belongs, on the suhjeots of the aforesaid two courses of lectures, provided that the curriculum prescribed by the said two courses of lectures shall embraoe all that is contained in the course now prescribed hy the Professors of the King's Inns, or ae ths same may he from time to time varied hy any rules of the Benchers.

VI.—Every Student admitted into the Society after the above date (if not a graduate of ons of ths said Universities) shall, as a condition precedent to heing called to the Bar, produce certificates of his having attended four courses of lectures—viz., One course of tho lectures of each of the said four Professors, and *at least* five-sixths of the loctures of each session or University term, in such mannor, however, that every such Student shall he engaged not less than three years in the study of the law in Ireland, exclusive of ths two years necessary for koeping terms in England, in every ono of which threo years, one complete courss of lectures must be kept; any Student who shall produce certificates of his having attended during three years the courses of lectures delivered hy the Professors of English Law and of Jurisprudence, in one of ths Colleges of the Queen's University, and of his having passed the general examinations in such Collegs on the suhjects so lectured on, shall ho deemed ontitled to such and the sams privileges, in respect to his heing called to the Bar, as if he had actually attended ons course of the lectures of each of the two Law Professors of ths University of Dublin, and had heen engaged for two yeare in such attendance; hut this rulo and the preceding ons are not intended to affect the number of Terms' Commons required by the present rules of the Society, to be kept hy Students of the King's Inns, prior to being called to ths Bar.

VII.—If from illness or other sufficient cause any Student should be preventsd from completing any course of lectures necessary towards being called to the Bar, the Legal Education Committeo havo power to direct what furthor attendance, if any, shall ho sufficiont in such case.—Rules as to Legal Education, No. 3.

VIII.—Every such Student, having complisd with the foregoing Rules, desiring to ho admitted to the degree of Barrister-at-Law, and hsing of the full age of twenty-ons years, shall present a memorial in the printed form No. 2, at the Undsr-Treasurer's Office, threo cloar days at the least before the first day of term, said memorial to bs signed by the Student himself; the certificats annexed thereto to he signed by a practising Barrister of at least tsn years' standing, and tho doclaration at foot thsreof by a Bencher.

IX.—Evsry such Student so applying for admission to the degree of a Barrister-at-Law shall, on presenting his said memorial, pay to the Under-Treasurer the sum of thirty-two ponnds eighteen shillings and nine pence, being ths ancient fee payable to the Society thereon, and lodge at ths same time a certificate of having paid fifty pounds stamp duty at the Stamp Office; also a certificate of having kspt the requisite number of terms from one of ths Inns of Conrt in England; and if a graduate of any of the said Universities, shall also lodge a tcstimonium from euch University of having obtained the degres of Bachelor of Arte or Bachelor of Law therein.

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APPENDIX, No. 2.

Selections from Scholarship and Sessional Examination Papers—Session 1871–72.

ARTS AND MEDICINE.

Scholarship Examination—First Year.

Greek.—*Examiner, Professor D'Arcy Thompson,* M.A.

1. Translate the following passage, and parse the words to which the figure 1 is appended :—

ἐννῆμαρ ξείνισσε καὶ ἐννέα βοῦς ἱέρευσεν.
ἀλλ' ὅτε δὴ δεκάτη ἐφάνη ῥοδοδάκτυλος ἠώς,
καὶ τότε μιν ἐρέεινε καὶ ἤτεε σῆμα ἰδέσθαι,
ὅ τι ῥά οἱ γαμβροῖο πάρα Προίτοιο φέροιτο.
αὐτὰρ ἐπεὶ δὴ σῆμα κακὸν παρεδέξατο γαμβροῦ,
πρῶτον μέν ῥα Χίμαιραν ἀμαιμακέτην ἐκέλευσεν
πεφνέμεν.[1] *ἣ δ' ἄρ' ἔην θεῖον γένος, οὐδ' ἀνθρώπων,*
πρόσθε λέων, ὄπιθεν δὲ δράκων, μέσση δὲ χίμαιρα,
δεινὸν ἀποπνείουσα πυρὸς μένος αἰθομένοιο.
καὶ τὴν μὲν κατέπεφνε θεῶν τεράεσσι πιθήσας,
δεύτερον αὖ Σολύμοισι μαχήσατο κυδαλίμοισιν·
καρτίστην δὴ τήν γε μάχην φάτο[1] *δύμεναι*[1] *ἀνδρῶν.*
τὸ τρίτον αὖ κατέπεφνεν Ἀμαζόνας ἀντιανείρας.
τῷ δ' ἄρ' ἀνερχομένῳ πυκινὸν δόλον ἄλλον ὕφαινεν·
κρίνας ἐκ Λυκίης εὐρείης φῶτας ἀρίστους
εἶσε[1] *λόχον· τοὶ δ' οὔ τι πάλιν οἶκόνδε νέοντο·*
πάντας γὰρ κατέπεφνεν ἀμύμων Βελλεροφόντης.
ἀλλ' ὅτε δὴ γίγνωσκε θεοῦ γόνον ἠὺν ἐόντα,
αὐτοῦ μιν κατέρυκε, δίδου δ' ὅ γε θυγατέρα ἥν,
δῶκε δέ οἱ τιμῆς βασιληΐδος ἥμισυ πάσης·
καὶ μέν οἱ Λύκιοι τέμενος τάμον ἔξοχον ἄλλων,
καλὸν, φυταλιῆς καὶ ἀρούρης, ὄφρα νέμοιτο.

Iliad, vi., 174–195.

(*a.*) Give the meaning, and, where possible, derivation or composition of the words :—*σκότιος—αἴσιμος—ἄντυξ—ἠπιόδωρος—ἔλκηθμος—ἠλέκτωρ—δέμας—νεῦμαι—ὀπίζομαι—ἐελμένος—δριμύς—ἀρήμενος.*

2. Translate the following, and parse words marked as above :—

εἰ πᾶσι ταὐτὸν καλὸν[2] *ἔφυ σοφόν*[2] *θ' ἅμα,*
οὐκ ἦν ἂν ἀμφίλεκτος ἀνθρώποις ἔρις·[3]
νῦν δ' οὔθ' ὅμοιον οὐδὲν οὔτ' ἴσον βροτοῖς,
πλὴν ὀνόμασιν,[3] *τὸ δ' ἔργον οὐκ ἔστιν τόδε.*
ἐγὼ γὰρ οὐδέν, μῆτερ,[3] *ἀποκρύψας*[1] *ἐρῶ·*

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Appendix, No. 2.

Scholarship Examinations.

ἄστρων ἂν ἔλθοιμ'[1] ἡλίου πρὸς ἀντολὰς
καὶ γῆς ἔνερθε, δυνατὸς ὢν δρᾶσαι τάδε,
τὴν θεῶν μεγίστην[2] ὥστ' ἔχειν τυραννίδα.[3]
τοῦτ' οὖν τὸ χρηστόν, μῆτερ, οὐχὶ βούλομαι
ἄλλῳ παρεῖναι[1] μᾶλλον[2] ἢ σώζειν ἐμοί·
ἀνανδρία γάρ, τὸ πλέον ὅστις ἀπολέσας[1]
τοὔλασσον[2] ἔλαβε.' πρὸς δὲ τοῖσδ' αἰσχύνομαι,
ἐλθόντα σὺν ὅπλοις τόνδε καὶ πορθοῦντα γῆν
τυχεῖν ἃ χρῄζει· ταῖς γὰρ ἂν Θήβαις τόδε
γένοιτ'[1] ὄνειδος,[3] εἰ Μυκηναίου δορὸς,[3]
φόβῳ παρείην[1] σκῆπτρα τἀμὰ τῷδ' ἔχειν.
χρῆν δ' αὐτὸν οὐχ ὅπλοισι τὰς διαλλαγάς,
μῆτερ, ποιεῖσθαι· πᾶν γὰρ ἐξαιρεῖ λόγος
ὃ καὶ σίδηρος πολεμίων[2] δράσειεν ἄν.
ἀλλ' εἰ μὲν ἄλλως τήνδε γῆν οἰκεῖν θέλει,
ἔξεστ'· ἐκεῖνο δ' οὐχ ἑκὼν μεθήσομαι,
ἄρχειν παρών[1] μοι, τῷδε δουλεῦσαί ποτε.

EURIPIDES—*Phœnissæ*, 499–520.

(*a.*) Give the principal tenses of the verbs to which the figure (1) is attached.

(*b.*) Compare the adjectives and adverb to which the figure (2) is attached.

(*c.*) Write out in full the singular number of the nouns to which the figure (3) is attached.

---

1. Translate the following passage, and parse the words to which the figure 1 is appended :—

ἤδη δὲ πέρα μεσούσης τῆς ἡμέρας προαγαγόντες τὸ στράτευμα ἔξω τῶν κωμῶν ἐλάμβανον τὰ ἐπιτήδεια ὅ, τι τις ὀρᾷ ἐντὸς τῆς φάλαγγος, καὶ ἐξαίφνης ὁρῶσι τοὺς πολεμίους ὑπερβάλλοντας κατὰ λόφους τινὰς ἐκ τοῦ ἐναντίου, τεταγμένους ἐπὶ φάλαγγος, ἱππέας τε πολλοὺς καὶ πεζούς· καὶ γὰρ Σπιθριδάτης καὶ Ῥαθίνης ἦκον παρὰ Φαρναβάζου ἔχοντες τὴν δύναμιν. ἐπεὶ δὲ κατεῖδον τοὺς Ἕλληνας οἱ πολέμιοι, ἔστησαν ἀπέχοντες αὐτῶν ὅσον πεντεκαίδεκα σταδίους. . ἐκ τούτου εὐθὺς Ἀρηξίων ὁ μάντις τῶν Ἑλλήνων σφαγιάζεται, καὶ ἐγένετο ἐπὶ τοῦ πρώτου καλὰ τὰ σφάγια. ἔνθα δὴ Ξενοφῶν λέγει, Δοκεῖ μοι, ὦ ἄνδρες στρατηγοί, ἐπιτάξασθαι τῇ φάλαγγι λόχους φύλακας, ἵνα ἄν που δέῃ ὧσιν οἱ ἐπιβοηθήσοντες τῇ φάλαγγι καὶ οἱ πολέμιοι τεταραγμένοι ἐμπίπτωσιν εἰς τεταγμένους καὶ ἀκεραίους. συνεδόκει ταῦτα πᾶσιν.—XENOPHON—*Anabasis*, VI., v., 7, 8, 9.

2. Render into Greek the following sentences :—

(*a.*) My friends and those of my father were present.
(*b.*) I honour those that honour themselves.
(*c.*) The slave is more cunning than honest.
(*d.*) The woman is not capable of a wicked action.
(*e.*) I must set about the task of instructing the child immediately.
(*f.*) Do not accustom yourself to speak slightingly concerning other people.

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(*g.*) The men appeared to get more and more stupid daily.
(*h.*) After marching by night, they reached Athens early the next day.
(*i.*) We arrived home on the tenth day.
(*j.*) I would kill him, if I were able to do so.
(*k.*) I will kill him, whenever I have the opportunity of doing so.
(*l.*) He would have killed us, if he had had an opportunity of doing so.

LATIN.—*Examiner, Professor Maguire,* LL.D.

1. Translate the following :—

Intentus perficiendo templo, fabris undique ex Etruriâ accitis, non pecuniâ solùm ad id publicâ est usus, sed operis etiam ex plebe. qui cum haud parvus et ipse militiae adderetur labor, minus tamen plebs gravabatur se templa deûm exaedificare manibus suis, quàm postquam et ad alia ut specie minora sic laboris aliquanto majoris traducebantur opera, foros in circo faciendos cloacamque maximam, receptaculum omnium purgamentorum urbis, eub terram agendam; quibue duobus operibus vix nova haec magnificentia quicquam adaequare potuit. his laboribus exercitâ plebe, quia et urbi multitudinem, ubi usus non esset, oneri rebatur esse, et colonis mittendis occupari latiùs imperii fines volebat, Signiam Circeiosque colonos misit, praesidia urbi futura terrâ marique.—LIVY, i., 56.

2. Translate the following passages :—

(*a*) "Tu semper urges flebilibus modis
Mysten ademtum, nec tibi vespero
Surgente decedunt amores
Nec rapidum fugiente solem.

At non ter aevo functus amabilem
Ploravit omnes Antilochum senex
Annos, nec impubem parentes
Troilou aut Phrygiae sorores

Flevere semper. Desine mollium
Tandem querelarum, et potiùs nova
Cantemus Augusti tropaea
Caesaris et rigidum Niphaten,

Medumque flumen gentibus additum
Victis minores volvere vertices,
Intraque praescriptum Gelonos
Exiguis equitare campis."

HORACE—*Odes,* II., ix., 9–24.

(*b*) "At pater ut gnati, sic uos debemus, amici
Si quod sit vitium, non fastidire; strabonem
Appellat *paetum* pater, et *pullum,* male parvus
Si cui filius est, ut abortivus fuit olim
Sisyphus; hunc *varum* distortis cruribus, illum
Balbutit *scaurum* pravis fultum malè talis.
Parciùs hic vivit: *frugi* dicatur. Ineptus
Et jactantior hic paulo est: *concinnus amicis*
Postulat ut videatur. At est truculentior atque
Plus aequo liber: *simplex fortis*que habeatur.
Caldior est: *acres* inter numeretur. Opinor,
Haec res et jungit, junctos et servat amicos.
At nos virtutes ipsas invertimus atque
Sincerum cupimus vas incrustare. Probus quis

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Appendix, No. 2.

Scholarship Examinations.

Nobiscum vivit, multùm demissus homo ille;
Tardo cognomen *pingui* damus. Hic fugit omnes
Insidias nullique malo latus obdit apertum;
Cum genus hoc inter vitae versetur, ubi acris
Invidia atque vigent ubi crimina; pro bene sano
Ac non incauto *fictum astutumque* vocamus.
Simplicior quis ot est, qualem me saepè libenter
Obtulerim tibi, Maecenas, ut fortè legentem
Aut tacitum impellat quovis sermono molestus:
'*Communi sensu plane caret*' inquimus. Eheu
Quam temerè in nosmet legem sancimus iniquam!"

HORACE—*Satires*, I., iii., 44–67.

3. Translate the following:—

Deos hominesque testamur, imperator, nos arma neque contra patriam cepisse, neque quo periculum aliis faceremus, sed uti corpora nostra ab injuriâ tuta forent; qui miseri, egentes, violentiâ atque crudelitate feneratorum plerique patriae, sed omnes fama atque fortunis expertes sumus; neque cuiquam nostrûm licuit more majorum lege uti, neque amisso patrimonio liberum corpus habere; tanta saevitia feneratorum atque praetoris fuit. Saepè majores vostrûm, miseriti plebis Romanae, decretis suis inopiae ejus opitulati sunt; ac novissumè memoriâ nostrâ propter magnitudinem aeris alieni, volentibus omnibus bonis, argentum aero solutum est. Saepè ipsa plebes, aut dominandi studio permota aut superbiâ magistratuum, armata a patribus secessit. At nos non imperium neque divitias petimus, quarum rerum caussâ bella atque certamina omnia inter mortales sunt, sed libertatem, quam nemo bonus nisi cum animâ simul amittit. Te atque senatum obtestamur, consulatis miseris civibus, legis praesidium, quod iniquitas praetoris oripuit, restituatis, neve nobis eam necessitudinem imponatis, ut quaeramus, quonam modo maxumè ulti sanguinem nostrum pereamus.

SALLUST—*Catilina*, xxxiii.

OBS.—If you have any time to spare after your translations are completed, you may employ it in very briefly annotating any word, passage, construction, or historical allusion that may seem to you as especially deserving of notice.

---

1. Translate the following:—

"Nate, mihi vitâ quondam, dum vita manebat,
Care magis, nate Iliacis exercite fatis,
Imperio Jovis huc venio, qui classibus ignem
Depulit, et caelo tandem miseratus ab alto est.
Consiliis pare, quae nunc pulcherrima Nautes
Dat senior; lectos juvenes, fortissima corda,
Defer in Italiam: gens dura atque aspera cultu
Debellanda tibi Latio est. Ditis tamen ante
Infernas accede domos, et Averna per alta
Congressus pete, nate, meos—non me impia namque
Tartara habent tristesque umbrae, sed amoena piorum
Concilia Elysiumque colo;—huc casta Sibylla
Nigrarum multo pecudum te sanguine ducet.
Tum genus omne tuum et, quae dentur moenia, disces.
Jamque vale: torquet medios nox humida oursus,
Et me saevus equis Oriens afflavit anhelis."

VIRGIL—*Æneid*, v., 724–739.

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2. Translate the following :—

Itaque una lex, unus vir, unus annus uou modo uos illa miseria ac turpitudine liberavit, sed etiam effecit, ut aliquando vere videremur omnibus gentibus ac natiouibus terra marique imperare. Quo mihi etiam indignius videtur obtrectatum esse adhuc, Gabinio dicam anne Pompeio, an utrique, id quod est verius, ne legaretur A. Gabinius Cn. Pompeio expeteuti ac postulanti. Utrum ille, qui postulat ad tantum bellum legatum quem velit, idoneus non est qui impetret, quum ceteri ad expilandos socios diripiendasque provincias quos voluerunt legatos eduxerint, an ipse, cuius lege salus ac dignitas populo Romano atque omnibus gentibus constituta est, expers esse debet gloriae eius imperatoris atque eius exercitus, qui consilio ipsius ac periculo est constitutus? An C. Falcidius, Q. Metellus, Q. Caelius Latiniensis, Cn. Lentulus, quos omnes honoris causa nomino, quum tribuni plebi fuissent, anno proximo legati esse potuerunt: in uno Gabinio sunt tam diligentes, qui in hoc bello, quod lege Gabinia geritur, in hoc imperatore atque exercitu, quem per vos ipse constituit, etiam praecipuo iure esse deberet? De quo legando consules spero ad seuatum relaturos. Qui si dubitabunt aut gravabuntur, ego me profiteor relaturum, neque me impediet cuiusquam inimicum edictum, quo minus vobis fretus vestrum ius beneficiumque defendam, neque praeter intercessiouem quidquam audiam, de qua, ut arbitror, isti ipsi, qui minantur, etiam atque etiam quid liceat considerabunt. Mea quidem sententia, Quirites, unus A. Gabinius belli maritimi rerumque gestarum Cn. Pompeio socius ascribitur, propterea quod alter uni illud bellum suscipiendum vestris suffragiis detulit, alter delatum susceptumque confecit.—CICERO—*Pro Lege Manilia*, chap. xix.

3. Render the followiug into Latin prose :—

"By which circumstances the State was thrown into commotion, and the whole appearance of the city was changed. From the height of cheerfulness and merriment, which a protracted peace had brought about, all of a sudden a deep gloom overspread the city. Meu went hurrying to and fro; were startled at every incident; no place, uo individual was trusted; they were not at war, yet were not eujoying peace; all perils they measured by their own fears. The women, who from the wide exteut of the republic had been unused to the terrors of war, might be seen beating their breasts, holding up suppliant hands to heaveu, questioning the passer-by, listening with terror to each new piece of intelligeuce."

OBS.—If you have auy time to spare after your translations are coupleted, you may employ it in very briefly annotating auy word, passage, construction, or historical allusion that may seem to you as especially deserving of notice.

Professor Moffett, LL.D.

1. Sketch the career and character of Alexander the Great, or of Julius Cæsar.
2. Give an account of the usurpation of Pisistratus.
3. Compare the expulsiou of the Pisistratids from Athens and of the Tarquins from Rome.
4. Enumerate, with dates, the events of the Persian Wars from the battle of Marathon to the battle of Salamis.
5. What were the principal points in dispute between the Patricians and the Plebeians at Rome?

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Appendix, No. 2.

Scholarship Examinations.

6. State the causes and the results of the three Punic Wars; enumerating, with dates, the principal Battles.

7. Give the modern names of the following rivers:—Arar, Liger, Sequana, Matrona, Padus, Rhenus, Rhodanus.

8. Name the birthplaces of Euripides, Lucian, Horace, Virgil, Livy, and Sallust.

9. Name the twelve Counties of Wales.

10. Name the Counties of Ulster.

11. On what rivers are the following Cities situated:—Bristol, Liverpool, Glasgow, Warsaw, Vienna, Florence, St. Petersburgh, Washington, Madrid, Lyons, Lisbon?

12. What are the divisions of Australia? Name the Capital towns of each division.

13. How would you *sail* from Odessa, in Russia, to Archangel, in the same country?

ARTS, MEDICINE, AND ENGINEERING.

SCIENCE SCHOLARSHIP—FIRST YEAR.

ARITHMETIC.—*Examiner, Professor Allman*, LL.D.

1. Write down in figures the following numbers:—

Nineteen hundred thousand eight hundred and seven; eight hundred and seventy million eight hundred and seven thousand and ninety. Express the number 703500609 in words.

Explain the principle by which we can write any number, however great, with a few characters, and show the necessity of a character for cipher.

2. Find the greatest common measure of 6327 and 23997; find also the least common multiple of 7, 15, 21, 28, 35, 100, 125.

3. State and prove the rules for the conversion of circulating decimals into equivalent vulgar fractions.

Reduce to equivalent vulgar fractions:—$\cdot\dot{7}2\dot{9}$; $2\cdot6\dot{4}2857\dot{1}$.

4. Assuming that three hectares contain 35,881 square yards and that one hectare contains 10,000 square metres, find the length of a metre.

Professor Curtis, LL.D.

5. Express 5*s.* 6*d.* as a decimal of £7 10*s.*; also 1 qr. 7 lbs. as a decimal of 1 cwt.

6. Calculate the price of 3 ton 5 cwt. 3 qrs. 9 lbs. at 6*s.* 3*d.* per cwt.

7. What would be the gross income of a person who, after paying an income tax of 6*d.* in the pound, has a net income of £500?

8. A bankrupt's effects amount to £1,378 7*s.* 8*d.*, his debts to £30,000; what will each of his creditors receive in the pound?

Professor Allman, LL.D.

1. Prove the following identities:—

$$\{(x^2-yz)+(y^2-zx)+(z^2-xy)\}\cdot\{x+y+z\}=x^3+y^3+z^3-3xyz;$$

$$(x^2+a^2)(y^2+b^2)(z^2+c^2)=(bcx+cay+abz-xyz)^2+(yza+zxb+xyc-abc)^2.$$

2. Solve the following equations:—

$$\frac{x+3}{2x+1}=\frac{2x+3}{3x+1};\quad \frac{5(3x-1)}{1+5\sqrt{x}}+\frac{2}{\sqrt{x}}=3\sqrt{x}.$$

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3. If from any angle of a triangle, a straight line be drawn perpendicular to the base, prove that the rectangle under the sides of the triangle is equal to the rectangle under the perpendicular and the diameter of the circle described about the triangle.

4. Prove that the perpendiculars drawn from the angles of a triangle on the opposite side intersect in the same point.

5. In any triangle show that—

$$a^2-b^2=2c\left\{a\cos\left(\frac{\pi}{3}+\mathrm{B}\right)-b\cos\left(\frac{\pi}{3}+\mathrm{A}\right)\right\}.$$

6. Prove the formulæ :—

$$\sin\tfrac{1}{2}\mathrm{A}=\tfrac{1}{2}\left\{\pm\sqrt{1+\sin\mathrm{A}}\mp\sqrt{1-\sin\mathrm{A}}\right\};\ \cos\tfrac{1}{2}\mathrm{A}=\tfrac{1}{2}\left\{\pm\sqrt{1+\sin\mathrm{A}}\pm\sqrt{1-\sin\mathrm{A}}\right\}.$$

Deduce hence the values of sin 15° and cos 15° from the known value of sin 30°.

7. Given log 24=1·38021, log 25=1·39794, and log 26=1·41497 ; find log 117 and log 156.

Professor Curtis, LL.D.

8. If the geometric mean between two numbers be to the harmonic mean as $1 : n$, prove that the numbers are to one another as $1+\sqrt{1-n^2} : 1-\sqrt{1-n^2}$.

9. Prove *both analytically and geometrically* that the arithmetical, geometrical, and harmonic mean between two lines are in geometrical progression.

10. If $x+\dfrac{1}{x}=z$, prove that—

$$x^{n+1}+\frac{1}{x^{n+1}}=\left(x^n+\frac{1}{x^n}\right)z-\left(x^{n-1}+\frac{1}{x^{n-1}}\right).$$

11. Given the sum and the sum of the squares of three quantities in geometrical progression ; find them.

12. Draw a tangent to a given circle so that the portion of it intercepted between two fixed radii may be of given length.

13. Prove the formulæ :—

$$\tan 3\mathrm{A}=\frac{3\tan\mathrm{A}-\tan^3\mathrm{A}}{1-3\tan^2\mathrm{A}};\ \frac{\sin 2\phi}{2\tan\phi}=1-\tan^2\phi+\tan^4\phi-\&c.$$

14. If $\tan\mathrm{A}+\sec\mathrm{A}=\frac{3}{2}$, find sinA.

Licentiate in Arts Exhibition—First Year.

Examination for Licentiate in Arts.

Examiner, Professor Allman, LL.D.

1. Construct a triangle whose sides shall be respectively equal to three given straight lines, of which any two together are greater than the third. How would the construction fail if the given condition were not satisfied ?

2. If a straight line bisect the vertical angle and the base of a triangle, show that the triangle is isosceles.

3. If $a=2$, $b=3$, $x=6$, $y=5$, find the value of—

$$a+2x-\{b+y-[a-x-(b-2y)]\}.$$

4. Subtract $(a+b-c)^3+(a-b+c)^3+(b+c-a)^3$ from $(a+b+c)^3$.

5. Find a fraction, such that if the numerator and denominator be each increased by unity, its value will be changed into $\frac{1}{2}$, while if they each be diminished by unity, its value will become $\frac{1}{3}$.

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Appendix, No. 2.

Examination for Licentiate in Arts.

Professor Curtis, LL.D.

6. Prove that the square of the sum of any two lines is equal to four times the rectangle under the lines together with the square of their difference.

7. Cut a given straight line in such a way that the sum of the squares of the parts shall be equal to m times the rectangle under the parts. What is the least numerical value that m can have?

8. Prove that in a right angled triangle the square erected on the perimeter is equal to four times the area together with double the rectangle under the hypotenuse and perimeter.

9. Divide $x^5-x^4+x^3-x^2+2x-1$ by x^2+x-1.

10. There is a number, consisting of two digits, which is equal to four times the sum of these digits; and if 9 be subtracted from twice the number, the digits will be inverted: Find the number.

Prizes at Entrance.

Prizes at Entrance.

Geometry.—*Examiner, Professor Allman*, LL.D.

1. State Euclid's criterion of proportion; and apply it to prove that triangles of the same altitude are proportional to their bases.

2. The point of bisection of one side of a triangle is joined to a point of trisection of a second side, determine the ratio in which the joining line cuts the third side.

3. Prove that, in any triangle, the square of the line bisecting any angle, internal or external, is equal to the difference between the rectangle under the sides containing that angle and the rectangle under the segment of the side which the bisecting line meets.

4. Each side of a triangle, whose angles are given, passes through a given point; construct it so that its area shall be a maximum.

5. Given the chords of two arcs of a circle; find the chord of the sum and difference of those arcs.

Calculate the side of a regular quindecagon inscribed in a given circle.

Professor Curtis, LL.D.

6. Through a point, A, outside a given circle draw a line cutting the circle in points B and C in such a way that the difference of the squares of AB and AC shall be given, or maximum.

7. Find the locus of the intersection of the diagonals of a rectangle inscribed in a given triangle and having one side coincident with the base of the triangle. Hence inscribe in a triangle a rectangle as above, a diagonal of which shall pass through a given point.

8. Find a point in a given line so that the difference between the sum of the squares of its segments and the rectangle under the segments shall be given.

9. Prove that in any triangle the intersection of perpendiculars from the angles on the opposite sides, the intersection of the three bisectors of sides from opposite angles, and the centre of the circumscribed circle lie in one straight line.

10. Prove that if any arc of a circle be cut equally and unequally the rectangle under the chords of the unequal arcs together with the square of the chord of the arc intercepted between the two points of section is equal to the square of the chord of either of the equal arcs.

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Literary Scholarship—Second Year.

Modern Languages.—*Examiner, Professor Geisler*, PH.D.

German.

1. Translate into German:—

Ant. Friends, Romans, countrymen lend me your ears;
I come to bury Cæsar not to praise him.
The evil that men do lives after them;
The good is oft interred with their bones;
So let it be with Cæsar. The noble Brutus
Hath told you Cæsar was ambitious:
If it were so, it was a grievous fault,
And grievously hath Cæsar answer'd it.
Here, under leave of Brutus and the rest—
For Brutus is an honourable man;
So are they all, all honourable men—
Come I to speak in Cæsar's funeral.
He was my friend, faithful and just to me:
But Brutus says, he was ambitious;
And Brutus is an honourable man.
He hath brought many captives home to Rome;
Whose ransoms did the general coffers fill:
Did this in Cæsar seem ambitious?
When that the poor hath cried, Cæsar hath wept:
Ambition should be made of sterner stuff:
Yet Brutus says he was ambitious;
And Brutus is an honourable man.
You all did see that on the Lupercal
I thrice presented him a kingly crown,
Which he did thrice refuse; was this ambition?
Yet Brutus says he was ambitious;
And, sure, he is an honourable man.
I speak not to disprove what Brutus spoke,
But here I am to speak what I do know.
You all did love him once, not without cause.
What cause withholds you then, to mourn for him?
O judgment! thou art fled to brutish beasts
And men have lost their reason. Bear with me:
My heart is in the coffin there with Cæsar,
And I must pause till it come back to me.

Julius Cæsar, by Shakespeare.

2. *Literary Questions.*

1. Enumerate and characterize briefly the chief dramas of Goethe.
2. State in which relations Goethe and Schiller stood to each other.
3. Write in English a short sketch of the life of Goethe.

French.

(*Arts, Engineering, and Medical.*)

Translate into French:—

When Griselda thought that her husband had long enough enjoyed his new existence, and that there was danger of his forgetting the taste of sorrow, she changed her tone. One day, when he had not returned home exactly at the appointed minute, she received him with a frown, such as

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Scholarship Examinations.

would have made even Mars himself recoil, if Mars could have beheld such a frown upon the brow of his Venus.

"Dinner has been kept waiting for you this hour, my dear."

"I am very sorry for it; but why did you wait, my dear? I am really very sorry I am so late; but (looking at his watch) it is only half-past six by me."

"It is seven by me."

They presented their watches to each other, he in an apologetical, she in a reproachful attitude.

"I rather think you are too fast, my dear," said the gentleman.

"I am very sure you are too slow, my dear," said the lady.

"My watch never loses a minute in the four and twenty hours," said he.

"Nor mine a second," said she.

"I have reason to believe, I am right, my love," said the husband mildly.

"Reason!" exclaimed the wife astonished. "What reason can you possibly have to believe you are right; when I tell you, I am morally certain, you-are-wrong, my love?"

"My only reason for doubting it is that I set my watch by the sun to-day."

"The sun must be wrong," said the lady hastily. "You need not laugh; for I know what I am saying: the variation, the declination must be allowed for in computing it with the clock. Now, you know perfectly well, what I mean, though you will not explain it for me, because you are conscious I am in the right."

"Well, my dear, if you are conscious of it, that is sufficient. We will not dispute any more about such a trifle. Are they bringing up dinner?"

"If they know that you are come in; but I cannot tell whether they do or not. Pray, my dear Mrs. Nettleby," said the lady, turning to a female friend, and still holding her watch in her hand, "What o'clock is it by you? There is nobody in the world who hates disputing about trifles so much as I do; but I own I love to convince people that I am in the right."

Translate into English:—

Non, vous avez beau faire et beau me raisonner,
Rien de ce que je dis ne peut me détourner;
Trop de perversité règne au siècle où nous sommes,
Et je veux me tirer du commerce des hommes.
Quoi! contre ma partie on voit tout à la fois
L'honneur, la probité, la pudeur et les lois;
On publie en tous lieux l'équité de ma cause;
Sur la foi de mon droit mon âme se repose:
Cependant je me vois trompé par le succès,
J'ai pour moi la justice, et je perds mon procès!
Un traître dont on sait la scandaleuse histoire,
Est sorti triomphant d'une fausseté noire!
Toute la bonne foi céde à la trahison!
Il trouve, en m'égorgeant, moyen d'avoir raison!
Le poids de sa grimace, où brille l'artifice,
Renverse le bon droit et tourne la justice!
Il fait par un arrêt couronner son forfait!
Et, non content encore du tort que l'on me fait,

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Il court parmi le monde un livre abominable,
Et de qui la lecture est même coudamnable ;
Un livre à mériter la dernière rigueur,
Dout le fourbe a le front de me faire l'auteur !
Et là-dessus on voit Oronte qui murmure,
Et tâche méchamment d'appuyer l'imposture !
Lui qui d'un honnête homme à la cour tient le raug,
A qui je n'ai rien fait qu'être sincère et franc,
Qui me vient malgré moi, d'une ardeur empressée,
Sur des vers qu'il a faits demander ma peneée ;
Et parce que j'en use avec honnêteté,
Et ne le veux trahir, lui, ni la vérité,
Il aide à m'accabler d'un crime imaginaire !
Le voilà devenu mon plus grand adversaire !
Et jamais de sou cœur je n'aurai de pardon,
Pour n'avoir pas trouvé que son sonnet fût bou :
Et lee hommes, morbleu ! sont faits de cette sorte !
C'est à ces actions que la gloire les porte !
Voilà la bonne foi, le zèle vertueux,
La justice et l'honneur que l'on trouve chez eux !
Allons, c'est trop souffrir les chagrins qu'on nous forge :
Tirons-nous de ce bois et de ce coupe-gorge.
Puisque entre humains ainsi vous vivez en vrais loups,
Traîtres, vous ne m'aurez de ma vie avec vous.

MOLIERE—*Le Misanthrope.*

Translate into English :—

Malesherbes, introduit le jour même dans la tour où gémissait sou maître, fut forcé d'attendre dans le dernier guichet ; les commissaires de la commune, chargés d'empêcher l'introductiou furtive de toute arme qui pourrait soustraire le roi par le suicide à l'échafaud, l'arrêtèrent longtemps dans cette pièce. Le nom et l'aspect du vieillard inspirèreut quelque pudeur aux gardiens. Il se fouilla lui-même devant eux. Il n'avait sur lui que quelques pièeee diplomatiques et le journal des séances de la Convention. Dōrat-Cubières, membre de la commune homme plus vaniteux que cruel fanfaron de liberté, écrivain de boudoirs, déplacé dans les tragédies de la Révolution, était de service dans l'autichambre du roi. Dōrat-Cubières connaissait M. de Malesherbes et révérait en lui un philosophe que Voltaire son maître avait eignalé souvent à la reconnaissance dee sages. Il fit approcher le vieillard du foyer de la cheminée et s'entretint familièrement avec lui. " Malesherbes, lui dit-il, vous êtes l'ami de Louis XVI. ; comment pouvez-vous lui apporter des journaux où il verra toute l'indignation du peuple exprimée contre lui ?—Le roi n'est pas un homme comme un autre, répondit M. de Malesherbes ; il a une âme forte, il a une foi qui l'élève au-dessus de tout.—Vous êtes un honnête homme, vous, reprit Cubières, mais si vous ue l'étiez pas, vous pourriez lui porter une arme, du poison, lui conseiller une mort volontaire !" La physionomie de M. de Malesherbes trahit à ces mots une réticence qui semblait indigner en lui la pensée d'une de ces morts antiques qui enlevaient l'homme à la fortune et qui le rendaient, dane les extrémités du sort, eon propre juge et son propre libérateur ; puis, comme se reprenant lui-même de sa pensée : "Si le roi, dit-il, était de la religion des philosophes, s'il était un Caton ou un Brutus, il pourrait se tuer. Mais le roi est pieux, il est chrétien ; il sait que sa religion lui défend d'attenter à sa vie, il ne ee tuera pas."

Ces deux hommes échangèrent à ces mots entre eux un regard

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d'intelligence et se turent, comme réfléchissant en eux-mêmes, laquelle de ces deux doctrines était la plus courageuse et la plus sainte : de celle qui permet de se dérober au sort ou de celle qui ordonne de subir sa destinée en l'acceptant.

La porte de la chambre du roi s'ouvrit. Malesherbes s'avança incliné et d'un pas chancelant vers son maître. Louis XVI. était assis auprès d'une petite table. Il tenait à la main et lisait avec recueillement un volume de Tacite, cet évangile romain des grandes morts. A l'aspect de son ancien ministre, le roi rejeta le livre, se leva et s'élança, les bras ouverts et les yeux mouillés, vers le vieillard : " Ah ! lui dit-il en le serrant dans ses bras, où me retrouvez-vous et où m'a conduit ma passion pour l'amélioration du sort du peuple que nous avons tant aimé tous les deux ? Où venez-vous me chercher ? Votre dévouement expose votre vie et ne sauvera pas la mienne ! "

LAMARTINE—*Histoire des Girondins.*

GERMAN.

Translate into English :—

1. *Gessler* (nach einigem Stillschweigen).—Du bist ein Meister auf der Armbrust, Tell,
Man sagt, Du nehmst es auf mit jedem Schützen ?
Walther. Und das muss wahr sein, Herr, 'nen Apfel schiesst
Der Vater dir vom Baum auf hundert Schritte.
Gessler. Ist das dein Knabe, Tell ?
Tell. Ja, lieber Herr.
Gessler. Hast du der Kinder mehr ?
Tell. Zwei Knaben, Herr.
Gessler. Und welcher ist's, den du am meisten liebst ?
Tell. Herr, Beide sind sie mir gleich liebe Kinder.
Gessler. Nun, Tell ! weil du den Apfel triffst vom Baume
Auf hundert Schritt, so wirst du deine Kunst
Vor mir bewähren müssen—Nimm die Armbrust—
Du hast sie gleich zur Hand—und mach dich fertig,
Einen Apfel von des Knaben Kopf zu schiessen—
Doch will ich rathen, zielo gut, dass du
Den Apfel treffest auf den ersten Schuss ;
Denn fehlst du ihn, so is dein Kopf verloren.
[*Alle geben Zeichen des Schreckens.*]
Tell. Herr,—welches Ungeheure sinnet ihr
Mir an ?—Ich soll vom Haupte meines Kindes—
—Nein, nein doch, lieber Herr, das kommt euch nicht
Zu Sinn—Verhüt's der gnäd'ge Gott—Das könnt ihr
Im Ernst von einem Vater nicht begehren !
Gessler. Du wirst den Apfel schiessen von dem Kopf
Des Knaben—ich begehr's und will's.
Tell. Ich soll
Mit meiner Armbrust auf das liebe Haupt
Des eignen Kindes zielen ?—Eher sterb' ich !
Gessler. Du schiessest oder stirbst mit deinem Knaben.
Tell. Ich soll der Mörder werden meines Kinds !
Herr, ihr habt keine Kinder—wisset nicht
Was sich bewegt in eines Vaters Herzen.
Gessler. Ei, Tell, du bist ja plötzlich so besonnen !
Man sagte mir, dass du ein Träumer seyst

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Und dich entfernst von anderer Menschen Weise.
Du liebst das Seltsame—drum hab' ich jetzt
Ein eigen Wagstück für dich ausgesucht.
Ein Andrer wohl bedächte eich—du drückst
Die Augen zu und greifst es herzhaft an.

Wilhelm Tell by SCHILLER.

Translate into English :—

2. Aus dem Gespräche verschwindet die Wahrheit, Glauben und Treue
Aus dem Leben, es lügt selbst auf der Lippe der Schwur.
In des Herzens vertraulichsten Bund, in der Liebe Geheimniss
Drängt sich der Sykophant, reiset von dem Freunde den Freund.
Auf die Unschuld schielt der Verrath mit verschlingendem Blicke,
Mit vergiftendem Biss tödtet des Lästerer's Zahn.
Feil ist in der geschändeten Bruet der Gedanke, die Liebe
Wirft des freien Gefühls göttlichen Adel hinweg.
Deiner heiligen Zeichen, o Wahrheit, hat der Betrug
Sich angemasst, der Natur köstlichste Stimmen entweiht,
Die das bedürftige Herz in der Freude Drang sich erfindet—
Kaum gibt wahres Gefühl noch durch Verstummen sich kund.
Auf der Tribune prahlet das Recht, in der Hütte die Eintracht,
Der Gesetze Gespenst steht an der Könige Throne
Jahre lang mag, Jahrhunderte lang die Mumie dauern,
Mag das trügende Bild lebender Fülle bestehn,
Bis die Natur erwacht, und mit schweren ehernen Händen
An das hohle Gebäu rühret die Noth und die Zeit,
Einer Tigerin gleich, die das eiserne Gitter durchbrochen,
Und des numidischen Waldes plötzlich und echrecklich gedenkt,
Aufsteht mit des Verbrechens Wuth und des Elends die Menschheit
Und in der Asche der Stadt sucht die verlorne Natur.

Der Spaziergang by SCHILLER.

SCIENCE SCHOLARSHIPS—SECOND YEAR.

Professor Allman, LL.D.

1. The distances of three fixed pointe in a horizontal plane, from which the elevations of an inaccessible point are the same, are a, b, c; prove that the height of the object above the plane is $\frac{abc \tan \alpha}{4\sqrt{s(s-a)(s-b)(s-c)}}$, where α is the elevation of the object, and $2s = a+b+c$.

2. Find the locus of a point on the surface of a sphere, euch that the sum of the cosines of its distances from three fixed points on the surface of the sphere shall be constant.

3. Bisect a hemisphere by a plane drawn parallel to its base.

4. Solve an equation, the roots of which are in arithmetical progression.

5. Prove that the sum of the squares of the co-efficients of an expanded binomial, whose index is n, is equal to the co-efficient of the middle term of the expanded binomial whose index is $2n$.

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Appendix, No. 2.

Scholarship Examinations.

6. Find the equation of the circle circumscribing the triangle formed by the lines $\alpha = 0$, $\beta = 0$, $\gamma = 0$.

7. Investigate by analytic geometry the locus of the middle points of chords of a given circle drawn parallel to a given line.

8. A straight line is drawn through a given point P within a circle, and cutting it in the points M, N. If a point p be taken in this straight line, such that $(Pp)^2 = PM, PN$, find the locus of p.

PRACTICAL ANATOMY.

1. State the purposes served by the malar bone, and describe the details of its articulations.

2. Describe the articulations, ligaments, and movements of the sixth rib.

3. Describe the articular surfaces, ligaments, and movements of a metacarpo-phalangeal articulation.

4. Describe the attachments, structure, muscular relations, and actions of the following muscles :—the biceps of the arm, the gluteus maximus, and the extensor proprius indicis.

5. Describe the attachments of muscles to the ischium.

THIRD YEAR.

PRACTICAL ANATOMY.

1. Describe the extent of the synovial cavity of each joint, into the construction of which any tarsal bone enters.

2. Describe the attachments, structure and actions of the following muscles :—the semi-membranosus, tibialis, posticus, posterior serrati, and superior constrictor of the pharynx.

3. Describe the courses of the arteries which ramify and anastomose round the scapula.

4. Describe the lobes and fissures of the liver, and the relations of the liver to the peritoneum.

5. Describe the cerebral hemispheres, mentioning the disposition of the more important convolutions and sulci. (The coverings are not wanted).

SURGERY.—*Examiner, Professor Browne,* M.D.

1. Give the symptoms of inflammation in bone, with the pathological changes which may occur in its progress, and how its termination is influenced by the character of the bone which is the seat of it.

2. What are the symptoms of abscess in the head of the tibia, and the treatment to be adopted for its cure?

3. Describe a case of caries in bone, the causes which generally produce it, and the bones most generally affected by it.

4. What are the characters which distinguish an encysted tumour from simple sarcoma?

5. What varieties of encysted tumours can you name; how do you distinguish them?

6. Name some of the varieties of sarcoma, and the means by which you diagnose them?

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ZOOLOGY.—*Examiner, Professor Melville*, M.D.

1. State the chief characteristics of the brain in birds.
2. Describe the structure and arrangement of the vascular system in fishes.
3. Mention the chief peculiarities of the skeleton in chelonia.
4. State the characteristics of the ungulata, and of the sub-groups.

BOTANY.

1. Define the terms:—definite and indefinite, as applied to wood-bundles.
2. Define the terms:—torus, corymb, bracteole, hilum, perisperm; and give examples.
3. State the characteristics of the natural orders:—compositæ, umbelliferæ, and gramineæ.
4. Describe the structure of the pollen-grain, and the mode of its development.

CHEMISTRY.—*Examiner, Professor Rowney*, PH.D.

1. Describe the method of preparing oxygen gas, its properties and uses.
2. Describe the process of saponification.
3. Give the composition and properties of the atmosphere.
4. Give a description of carbon, its different forms, properties, and uses.
5. Where is sulphur chiefly found? State the method of purifying it.
6. Give the laws of combination by weight and by volume.
7. What action takes place when carbon dioxide is passed through a tube containing red hot charcoal?
8. Describe the method of obtaining metallic sodium.
9. What is meant by a homologous series of compounds?
10. Describe the process of fermentation.
11. What is meant by destructive distillation?
12. What action takes place when fluoride of calcium is acted upon by sulphuric acid?

ENGINEERING SCHOLARSHIP—SECOND YEAR.

Examiner, Professor Townsend, M.A.

1. Through a given point draw a line perpendicular to a given line, the projections of the point and line being given.
2. Draw a tangent plane to a cone parallel to a given line.
3. Find the traces of a plane which passes through a given point and makes given angles with the planes of projection.
4. Print the accompanying lines in the free-hand style usually adopted for drawings.
5. Given the focus and directrix of a parabola; construct the curve, and draw a tangent to it from a point outside.
6. From the accompanying projections construct the isometrical drawing of the object.
7. With the same data as in last, construct the perspective drawing of the object.

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Appendix, No. 2.

Scholarship Examinations.

8. Through a given line draw a plane making a given angle with a plane whose traces are given.

9. Given the projections of a sphere and the traces of a plane, find the horizontal projection of the curve of intersection.

10. The scale of a map is 2·5 chains to one inch, this is reduced to half its area by the pantograph; find the scale of the new map.

Third Year.

Examiner, Professor Townsend, M.A.

1. Adjust the level set before you.

2. Show how to test the adjustments in the theodolite set before you, and to effect them if necessary.

3. Find the acreage of the accompanying survey in Irish measure.

4. Print neatly the accompanying lines in the free-hand style usually adopted for engineering drawings.

5. Given the base and base angles of a large triangle in a trigonometrical survey if also the vertical angle be observed; show how to check the observation, and also the mode of solving the triangles.

6. In a triangle given a and b, and A with a small error in A; find the corresponding error in small c —·

7. The radius of a curve is 874·5 feet, angle between tangents 144° 16′, chord 100 feet; find tangent, secant, length of curve, and tangential angle.

8. Base 30 feet; slopes $1\frac{1}{2}$ to 1. Calculate the contents in cubic yards and the surface of the slopes in square yards.

Heights.		Black.	Red.	Distance in Chains.
0	7	40	8·6	5
7	13	252	24·4	4
13	20	676	40·3	6
20	25	1243	55·0	3
25	18	1140	52·6	7
18	6	381	29·3	4
6	0	29	7·3	5

9. When a cutting is made in ground with side-long slope, prove that the area of the slopes $= \frac{L\sqrt{1+s^2}}{r^2 - s^2}\left\{h + h' + \frac{2b_0 s}{r^2}\right\}$.

10. Prove that the dip in seconds $= 57{\cdot}438\sqrt{h\ (\text{feet})}$.

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Senior Scholarship.

Mathematics.—*Examiner, Professor Allman*, LL.D.

1. Find the number and the situation of the real roots of the equation—

$$x^4 - 2x^3 - 7x^2 + 10x + 10 = 0.$$

2. Prove that the normal at any point P of the surface F $\{\rho_1, \rho_2, \ldots \rho_n\}$ = const., where $\rho_1, \rho_2, \ldots \rho_n$ are the distances from any point on the surface to n fixed points, is determined by the following construction:—Measure on the distances from the point P to the n fixed points lengths proportional to $\frac{dF}{d\rho_1}, \frac{dF}{d\rho_2}, \ldots \frac{dF}{d\rho_n}$, respectively, the direction of the normal is that of the *resultant* of these lines.

3. The equation of a curve is $\rho_1 \rho_2 = k^2$, where ρ_1 and ρ_2 are the distances from any point P on the curve to two fixed points A and B; show that the portion of the tangent to the curve at P intercepted between lines drawn through A and B perpendicular to A P and B P respectively is bisected at the point P.

4. Determine the maximum and minimum values of the distance from a given point to a given surface, and show that on each normal there are two points such that the distance of any point between them from the surface is neither a maximum nor minimum.

5. If ρ be the radius of curvature at any point of a curve and ρ_1 the radius of curvature at the corresponding point of its evolute, prove that—

$$\rho_1 = \pm \frac{3pq^2 - r(1+p^2)}{q^3}, \text{ where } p = \frac{dy}{dx}, q = \frac{d^2y}{dx^2}, r = \frac{d^3y}{dx^3}.$$

Determine the curve whose radius of curvature is proportional to the radius of curvature of its evolute.

6. Show that the locus of the foot of the perpendicular from a given point (x', y', z') on the plane, which passes through the extremities of three conjugate diameters of the ellipsoid $\frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2} = 1$, is given by the equation—

$$a^2(x-x')^2 + b^2(y-y')^2 + c^2(z-z')^2 = 3\{x(x-x') + y(y-y') + z(z-z')\}^2.$$

7. If $\frac{x^2}{2a} + \frac{y^2}{2b} = z$ be the equation of a paraboloid referred to rectangular co-ordinates, and $\frac{X^2}{2a_1} + \frac{Y^2}{2b_1} = Z$ be the equation of the same paraboloid referred to obliqne axes, prove the following relatious—

$$a_1 b_1 \cos^2\nu \sin^2\widehat{XY} = ab; \quad \frac{\sin^2\lambda}{a} + \frac{\sin^2\mu}{b} = \left(\frac{1}{a_1} + \frac{1}{b_1}\right)\operatorname{cosec}^2\widehat{XY},$$

where λ, μ, ν are the angles whioh the normal at the origin of the (X, Y, Z) co-ordinates makes with the axes of (x, y, z).

8. Prove that the principal radii of curvature at any point of the surface $y = x \tan \frac{z}{a}$ are equal with opposite signs.

9. Determine a plane curve, such that the radius vector is proportional to the cube of the perpendicular from the pole on the tangent at the extremity of the radius vector.

10. Integrate the partial differential equation—

$$\left(\frac{y}{x} + \frac{z^2}{y^2} + 1\right)\frac{dz}{dx} - \left(\frac{x}{y} + \frac{z^2}{x^2} + 1\right)\frac{dz}{dy} = z\left(\frac{y}{x^2} - \frac{x}{y^2}\right).$$

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Appendix, No. 2.

Scholarship Examinations.

NATURAL PHILOSOPHY.—*Examiner, Professor Curtis,* LL.D.

1. A string is stretched on a smooth surface; prove that the plane of every consecutive pair of elements of the string is normal to the surface.

2. A solid body bounded by a surface of revolution rests on a horizontal plane in apparently neutral equilibrium; prove that its axis is vertical, and that the equilibrium is really stable, or unstable, according as the radius of curvature at the point of contact is minimum, or maximum. What is the analogous theorem if for the horizontal plane be substituted a rough curved surface of revolution, whose axis is vertical?

3. Two given weights are connected by an inextensible string passing over a fixed pulley, and whose weight is negligible; each rests on a curve, the two curves and the pulley being in a vertical plane. The weights are in equilibrium in all positions; given one of the curves, prove that the other can be found.

4. A body floats in a homogeneous liquid in apparently neutral equilibrium; prove that the principal moments of inertia of the section of the bounding surface made by the plane of floatation are equal, and that the equilibrium will be really stable or unstable, according as their value is minimum or maximum.

5. If a heterogeneous ellipsoid of revolution float in a homogeneous liquid in apparently neutral equilibrium, prove that the equilibrium will be really stable or unstable, according as the axis of revolution is its greater, or less, axis.

6. A rigid body is in motion, a point of the body being fixed, and no forces acting upon it; find the condition—

(1) that the angular velocity of the body should be constant;
(2) that the direction of the axis of rotation should be invariable.

7. If a planet describe an elliptic orbit round the sun situated in a focus, and the velocity be suddenly increased in the ratio $\frac{1+n}{n}$, the direction being unchanged, when the radius vector and longitude are r, and θ, prove that $\delta\pi$, the change in π, the longitude of perihelion, is given by the equation—

$$\delta\pi = \pm\frac{2\sin(\theta-\pi)}{ne}.$$

Determine also the change in the axis major.

8. Prove that the angular breadth of a rainbow of any order, n, is $\frac{2\Delta\mu}{\mu}\sqrt{\frac{(n+1)^2-\mu^2}{\mu^2-1}}+\frac{D}{R}$, D being the apparent diameter of the sun, and R its distance from the observer.

9. Prove that the caustic by refraction of a straight line is the evolute of the envelope of the circle $x^2+(y-b)^2=\mu^2-(a^2+b^2)$, a being the distance of the line from the point, from which the incident rays diverge, μ the index of refraction, and b a parameter. Hence determine the caustic.

10. Prove that the greatest equation of the centre for a planet moving in an orbit, whose excentricity, e, is small, is approximately $2e$, and determine in degrees, minutes, and seconds the greatest equation of the centre for the earth's orbit, whose excentricity is ·0168.

11. Determine the greatest equation of time that could be caused by the unequable motion of the earth in the ecliptic, and show that this could only be attained, when the longitude of perihelion is approximately equal to $\pm e$.

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12. Determine the earth's declination, when the equation of time caused by the obliquity of the ecliptic is maximum. What remarkable astronomical fact is accounted for by the consideration, that this maximum is greater than that mentioned in last question?

NATURAL PHILOSOPHY.—*Examiner, Professor Curtis,* LL.D.

1. Compare the molecular pressures at the surface of a liquid, when the surface is convex, plane, or concave, and explain how the fact that the pressure is different in all three cases accounts for the elevation, or depression, of a liquid in a capillary tube.

2. By what experiment may this explanation be verified for both elevation and depression:—

(1) By water? (2) By mercury?

3. A tuning fork makes 440 vibrations per second; calculate the corresponding wave length, and the lengths of the several closed and open tubes that will resound to it, assuming that the velocity of sound in air is 1,125 feet per second.

4. How would you determine the number of strokes necessary to cause water to issue from a pump, whose dimensions are given, the supply pipe being full of air at starting?

5. By what experimental fact has it been proved that in case of light the intensity is proportional to the square of the amplitude of vibration? Assuming the fact, deduce the law.

6. Explain the phenomena known as Newton's rings. Give Newton's laws regarding them, and deduce the formula, which contains them all.

7. Given the absolute indices of refraction for two ordinary media in contact along an indefinite plane, and supposing light to pass from the first into the second, determine the expression for the angle of incidence, for which the reflected ray is completely polarized; and show that if the course of the corresponding refracted ray be reversed, the reflected ray, which arises from it will be also completely polarized.

8. Determine the deviations produced by Rochon's and Wollaston's prisms, respectively, and compare their efficiency.

Prove that the force exerted by a magnet on a magnetic particle is in the line drawn from the latter to a point A, on the axis of the magnet produced, given by the formula $OA = l\frac{r_1^3 - r_2^3}{r_1^3 + r_2^3}$, $2l$ being the length of the magnet, r_1, r_2 the distances of the particle from the two poles, and O the centre of the magnet.

10. Account for the formation of the magnetic curves, and determine their equation, when the magnetic poles under the action of which they are formed, are of different intensities, and either similar or contrary.

Find also the curves of equilibrium under the same circumstances, and extend the result to the case in which any number of magnetic poles act on a particle of iron.

11. If Coulomb's balance of torsion be modified by employing *two* vertical threads *separated by a finite interval*, deduce an expression for the law, according to which it measures the intensity of an electric charge.

12. What experimental law is given by Jamin regarding the loss of electricity in using Coulomb's balance of torsion? Deduce the expression for the loss.

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Scholarship Examinations.

13. Assuming Ampère's law, prove that the total action of a magnetic pole on a closed Voltaic current is a force passing through the pole.

14. The extremities of the movable portion of a Voltaic current being on the axis of a magnet, determine the condition, that the current should rotate or not.

MODERN LANGUAGES.—*Examiner, Professor Geisler*, PH.D.

GERMAN.

Translate into German:—

I. He seized the occasion. They kept me company. They cherished the hope that he would recover his health. That wretched man has committed a fearful crime. He did me the favour of staying with me some time longer. He did not raise any objection against the arrangements which had been agreed upon by both parties. I called on him several times, but I am sorry, I never met him at home. He directed his special attention to this scientific question. He took the determination to break off his relations with these untrustworthy men. If he will not grant my demands, I must take other steps in order to obtain what I think I am fully entitled to.

II. After tea, when I seemed in spirits, she began thus—"I fancy, Charles, my dear, we shall have a great deal of good company at our church to-morrow." "Perhaps, we may, my dear," returned I; "though you need be under no uneasiness about that, you shall have a sermon, whether there be or not." "That is what I expect," returned she; "but I think, my dear, we ought to appear there as decently as possible, for who knowe what may happen?" "Your precautione," replied I, "are highly commendable. A decent behaviour and appearance in church is what charms me. We should be devout and humble, cheerful and serene." "Yes," cried she, "I know that; but I mean we should ge there in as proper a manner as possible." "You are quite right, my dear," returned I, "and I was going to make the very same propesal. The proper manner of going is to go there as early as possible, to have time for meditation before the service begins." "Ah, Charles," interrupted she, "all that is very true; but not what I would be at. I mean we should go there genteelly. You know the church is two miles off, and I protest, I don't like to see my daughtere trudging up to their pew all blowzed and red with walking, and looking for all the world as if they had been winners at a smock race. Now, my dear, my propesal is this—there are our two plough-horses, the colt that has been in eur family these nine years, and his companion, Blackberry, that has scarcely done an earthly thing for this month past. They are beth grown fat and lazy. Why should not they do something as well as we? And let me tell yon, wheu Moses has trimmed them a little, they will cut a very tolerable figure."

The Vicar of Wakefield.

Translate into English:—

1. Uud so erwuchs ich still am stillen Orte,
In Lebensglut den Schatten beigesellt:
—Da stand er plötzlich an des Klosters Pforte,
Schön wie ein Gott, und männlich, wie ein Held.
O, mein Empfinden nennen keine Worte!
Fremd kam er mir aus einer fremden Welt,
Und schnell, als wär' es ewig so gewesen,
Schloss sich der Bund, den keine Menschen lösen.

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2. Dein Staunen lob' ich und dein sittsam Schweigen:
Schamhafte Demuth ist der Reize Krone,
Denn ein Verborgenes ist sich das Schöne,
Und es erschrickt vor seiner eigenen Macht.
—Ich geh' und überlasse dich dir selbst,
Dass sich dein geist von seinem Schrecken löse:
Denn jedes Neue, auch das Glück, erschreckt.

3. Was sonst, als Euer unglücksel'ger Streit,
Der, unauslöschlich wüthend, auf dem Grab
Des kaum entseelten Vaters sich entflammte,
Nicht Raum noch Stätte der Versöhnung gab?
Konnt' ich die Schwester zwischen Eure wild
Entblössten Schwerter stellen? Konntet ihr
In diesem Sturm die Mutterstimme hören?
Und sollt' ich sie, des Frieden's theures Pfand,
Den letzten heil'gen Anker meiner Hoffnung,
An Eures Hasses Wuth unzeitig wagen?

4. Das ist der Liebe heil'ger Götterstrahl,
Der in die Seele schlägt und trifft und zündet,
Wenn sich Verwandtes zum Verwandten findet:
Da ist kein Widerstand und keine Wahl;
Es löst der Mensch nicht was der Himmel bindet
—Dem Bruder fall' ich bei, ich muss ihn loben,
Mein eigen Schicksal ist's was er erzählt.
Den Schleier hat er glücklich aufgehoben
Von dem Gefühl, das dunkel mich beseelt.

5. Sagt mir! ich kann's nicht fassen und deuten,
Wie es so schnell sich erfüllend genaht.
Längst wohl sah ich im Geist mit weiten
Schritten das Schreckensgespenst herschreiten
Dieser entsetzlichen blutigen That.
Dennoch übergiesst mich ein Grauen,
Da sie vorhanden ist und geschehen,
Da ich erfüllt muss vor Augen schauen,
Was ich in ahnender Furcht nur gesehen.
All mein Blut in den Adern erstarrt
Vor der grässlich entschiedenen Gegenwart.

SCHILLER—*Die Braut von Messina.*

II. Und so begann diejenige Richtung von der ich mein ganzes Leben über nicht abweichen Konnte, nämlich das jenige was mich erfreute oder quälte oder sonst beschäftigte, in ein Bild, ein Gedicht zu verwandeln, und darüber mit mir selbst abzuschliessen, um so wohl meine Begriffe von den äusseren Dingen zu berichtigen als mich im Inneren deshalb zu beruhigen. Die Gabe hierzu war wohl niemand nöthiger als mir, den seine Natur immerfort aus einem Extreme in das andere warf. Alles was daher von mir bekannt geworden, sind nur Bruchstücke einer grossen Confession, welche vollständig zu machen dieses Büchlein ein gewagter Versuch ist.

GOETHE—*Wahrheit und Dichtung.*

LITERARY QUESTIONS.

1. In the above short extract from Goethe's own biography he alludes to the intimate and personal relation in which his artistic productions

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Scholarship Examinations.

stood with his own sensations and the inmost experiences of his life. Look upon "Werther's Leiden" and the "Faust" in the light of this revelation, and try to explain which stages of Goethe's development are represented severally by "Werther" and "Faust."

2. Give an outline of German literature in the last ten years of Goethe's life.

3. State what you know of Uhland, Heine, and Platen.

FRENCH.

Translate into French:—

1. I received the account you sent me of your voyage with much pleasure, as it was a proof that you are not unmindful of our friendship, than which nothing, be assured, can afford me a more real satisfaction. Would you still oblige me more? Let it be by freely communicating to me the state of your province, and the plan of government upon which you proceed. For though the fame of your administration will undoubtedly reach me by many other ways, yet I shall be most pleased in being made acquainted with it by your own hand. As for myself, the hazards to which my letters are exposed, will not suffer me to be so frequent in giving you my sentiments of public affairs, as I shall be in apprising you of what passes amongst us. I have hopes, however, that our colleague Cæsar intends, and indeed that he actually has it under consideration, to establish a republican form of government of some kind; and it is of much importance that you should be present in his council for the purpose. But if it be more for your own glory to preside over Asia, and to preserve that ill-affected part of the republic in its allegiance, I ought to regulate my inclinations by yours, and prefer what will most contribute to the advancement of your interest and your honour. Be assured, I shall employ my utmost zeal to promote both by every means that shall appear conducive to that end; among which it shall be my principal care to distinguish your illustrious father with all possible marks of my observance. This, indeed, is what I justly owe him, not only in regard to his high character and the friendship in which we have been long united, but in return, likewise, for the many favours which you and he have conferred upon me. Farewell.—*Letters of Cicero.*

Render in idiomatical French:—

2. He died of his natural death. They live in grand style. He is a first rate man. The enemy muster strong. Do not take it amiss. He carried the day. I am short-sighted. My eyes are dim. I have had my share of troubles. May I trouble you? I have heard of your trouble. I nearly fell. Atone for your foolish conduct. That pun cannot possibly be rendered in English. He clings to his opinion. I cannot stand it any longer. He sets up for a wit. He has done it without my knowledge. I kept my object in view. I will sue him.

3. Explain the difference of meaning between the following English and French words:—actual, *actuel;* to assist, *assister;* accomplishment, *accomplissement;* tutor, *tuteur;* traitor, *traiteur;* to labour, *labourer;* to cherish, *chérir;* to rest, *rester;* pleasant, *plaisant;* sensible, *sensible;* to cause, *causer;* to deserve, *desservir;* courtier, *courtier;* to dress, *dresser;* to attend, *attendre;* audience, *audience.*

4. What is the difference between:—"Je ne doute pas de ce que vous me dites," and "Je ne me doute pas de ce que vous me dites," "Elle a l'air Parisien," and "Elle a l'air Parisienne;" Je vous défie," and "Je me défie de vous;" "J'y irai en huit jours," and "J'y irai dans huit jours."

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LITERARY QUESTIONS.

1. Give an account of the extraordinary effect which Beaumarchai's plays produced upon French society, and refer especially to the effervescence of the public mind, and the character of public morals which they so faithfully portray.

2. By which writings did Madame de Staël become the object of the unrelenting hatred of Napoleon I.?

3. Dwell upon the merits of Ponsard as a dramatical writer, and show to which school he may be said to belong.

4. Judge Lamartine as the author of "L'Histoire des Girondins."

5. Point out some striking and essential differences in the way in which Guizot, Augustin Thierry, Thiers, and Michelet have conceived and treated history.

6. Enumerate the works of Victor Hugo and Alfred de Vigny.

BOTANY.—*Examiner, Professor Melville,* M.D.

1. Mention the technical terms given to the stipules in the genera:—cinchona, potamogeton, astragulus, and polygonum; to the fruit in ficus, hyoscyamus, acer, and delphinium; and to the form of the corolla in vicia, erica, veronica, and primula.

2. Describe the structure of the flower in the genera:—nymphæa, geranium, polygala, valeriana, alisma, eriophorum.

3. State the characters of the natural orders:—violaceæ, convolvulaceæ, urticaceæ, bromeliaceæ; also, point out their affinities and distribution.

4. Describe the morphology of a lichen, of an agaric, and of a fucus; paying particular attention to the structure and nomenclature of the reproductive organs.

5. Describe the morphology and phenomena of development in a lycopodium.

ZOOLOGY.

1. Give an account of the structure and development of the echinodermata; also, state the essential characters of the classes or groups adopted.

2. Describe the structure of the platyelminthes; state the characters of the orders, and give an account of the phenomena of development in the tapeworm.

3. Describe the organization of the cephalopoda, paying particular attention to the circulatory and generative systems. Name the orders and families, and give their special characteristics.

4. Describe the phenomena of development and the various forms of metamorphosis in the orders of insecta.

5. State the chief peculiarities of the skeleton (including the cranium), and of the vascular system in reptilia.

6. Describe the peculiarities of the organization in amphioxus, petromyzon, and polypteras.

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Appendix No. 2.

Sessional Examinations.

Sessional Examinations.—June, 1871.

English Language.—*Examiner, Professor Moffett*, LL.D.

1. What is the Morphological Classification of Languages?

To what conclusion has the Science of Language arrived as to the ultimate elements of human speech?

2. Omitting the Graeco-Latin (or Romance languages), state as fully as you can the sources that have contributed to the existing English vocabulary.

3. Explain and illustrate the *usus ethicus* of *will* and *shall*.

4. Correct or justify the following sentences:—

a. The House of Lords resolve.
b. The Council has resolved.
c. Stephen's party were broken up.
d. Riches profits not.
e. In an inquiry into the credibility of History the first question we will consider is.
f. It is I. Why, that's me.
g. Much depends on this rule being observed.
h. He or you are in the wrong.
i. Surely goodness and mercy shall follow me all the days of my life, and I will dwell in the house of the Lord for ever.
j. The captain with his men were taken prisoners.

5. Give the Plurals of the following words:—Die, potato, attorney, bean, dilettante, cargo, canto, echo, miasma, virtuoso.

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6. Define and enumerate the Fine Arts; and classify them with regard to their degrees of expressiveness.

7. State Bacon's theory of Poetry.

8. Quote any ten (or more) continuous lines from *Richard II.* which you think remarkable for beauty or power.

9. Explain the following passages:—

a. Fear, and be slain; no worse can come to fight:
And fight and die is death destroying death;
Where fearing dying pays death servile breath.
b. His coming hither hath no further scope
Than for his lineal royalties and to beg
Enfranchisement immediate on his knees.
c. Better far off than near be ne'er the near.
d. ————. And these two beget
A generation of still-breeding thoughts,
And these same thoughts people this little world,
In humours like the people of this world,
For no thought is contented.
e. My thoughts are minutes; and with sighs they jar
Their watches on unto mine eyes, the outward watch,
Whereto my finger, like a dial's point,
Is pointing still, in cleansing them from tears.

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10. What specimens does Macaulay give of Bacon's "two styles"?

11. How does Macaulay contrast the philosophical views of Plato and Bacon

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12. What resemblance does he trace between the intellectual characters of Bacon and Burke?

13. "The years during which Bacon held the Great Seal were among the darkest and most shameful in English history:"—What evidence does Macaulay offer for this statement?

14. Have you any criticism to offer on Macaulay's denunciation of Bacon's conduct as a Law-officer and a Judge? Examine the case of Peacham.

15. Complete each of the following sentences:—

a. "Two words form the key of the Baconian doctrine"——

b. "The chief peculiarity of Bacon's philosophy seems to us to have been"——

c. "The true philosophical temperament may, we think, be described in four words"——

16. What do you consider the chief characteristics of Macaulay's style? Illustrate your answer by quotation or reference.

Logic.

1. Define Generalization: state accurately the successive steps of the process, and the Laws of Thought involved in the General Notion.

2. Of what use are the Predicables? Compare Porphyry's classification with that of Aristotle, and Mr. Mill's with Dr. Thomson's.

Of what use are the Predicaments? How is this classification related to the Predicables?

3. Distinguish Logical, Physical, and Accidental Definition.

Explain the following principles:—

a. "Definitio *per se* clarior sit definito.

b. "Divisionem excipit Definitio."

4. Can you contradict a Singular Proposition?

Support your answer by reference to all the essentials of Contradiction.

5. Is there any *inference* in Opposition and Conversion?

6. Assuming successively the truth and the falsehood of A, E, I, and O; draw up a table of the inferences that may be drawn respecting the Opposed propositions in each case.

Prove that the rules of Contrary and Sub-contrary inference are redundant.

7 Why is A the most difficult proposition to establish, and O the reverse?

Are EIE, OAO, AEE, EAI, IEO, allowable Modes? If so, in what Figures? If not, give reasons.

8. Prove that:—

a. If the Minor Term be Universal in the Premises, both Premises must be Universal.

b. If either Premise be Particular, the Minor Term must be Particular.

c. If the Minor Premise be Negative, the Major must be Universal.

d. If the Major be I, the Mode must be Affirmative.

9. Explain the Dictum de Reciproco. Prove that:—

a. If either Premise of the Fourth Figure be Particular, it must be Affirmative.

b. If either Premise be Negative, it must be Universal.

c. If the Conclusion be Universal, it must be Negative.

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Appendix, No. 2.

Sessional Examinations.

10. "*Omnes* Modi reducuntur ad Impossibile." Reduce in this way Cesare and Darapti; and prove the conclusiveness of the process.

Is this method of proof inferior to the Ostensive?

11. "Ex falsis falsum, sed verum aliquando sequitur." Give an instance; and show whether this constitutes any objection to Syllogistic reasoning.

12. Of what use are Hypothetical Syllogisms?

State and illustrate the corresponding Fallacies in Categorical and Hypothetical reasoning.

13. Explain the nature, and exhibit the logical value of the argument from Analogy.

To what fallacies is the argument liable?

14. Give an account of the two forms of the Sorites; and prove the rules of each.

15. Define Chance and Probability.

How do you compute the force of Circumstantial evidence?

16. State what you know of Sir W. Hamilton's logical innovations.

Reduce the following reasoning to strict logical form:—

"Most men have coats;
Most men have waistcoats;
Some men have both coats and waistcoats."

17. Give the Dictum of the Unfigured Syllogism, with an example.

18. Give a general classification of Fallacies, with a particular account of the Fallacy of Accident.

19. Distinguish Petitio Principii and Arguing in a Circle.

Examine the allegation—that the Syllogism involves a Petitio Principii.

20. Give Aristotle's definitions of Enthymeme and Induction, with an explanation of the terms.

ENGLISH LITERATURE.

1. Draw up a genealogical table of the Aryan family of languages.

2. Name the most remarkable translations into English from Greek, Latin, Italian, French, Spanish, and German literatures.

State the principles of Translation; its uses, helps, and hindrances; and examine Dr. Johnson's dictum—that "Translation is the pest of speech."

3. Enumerate in chronological order the chief names in British Philosophy, from Bacon to the present day; adding to each name a few well-chosen adjectives characterizing the philosophical position and the literary style of the writer.

4. In the reigns of James I. and Charles I. we may distinguish the following schools of Poetry in England:—

(*a*). The followers of Spenser;
(*b*). The Satirists;
(*c*). The Metaphysical poets;
(*d*). The Amatory and Courtly poets:—

Name the chief writers belonging to each of these schools, and the works that best represent the genius of each.

5. Name all the best Elegiac poems in the English language; and give an account (with quotations) of any one of them.

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6. Enumerate, as far as you can in chronological order, the works of Chaucer—Prose and Verse.

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Appendix, No. 2.

Sessional Examinations.

7. Notice what you consider to be the characteristic touches in the delineations of the following characters in the Prologue of the Canterbury Tales :—The Merchant ; The Knight ; The Clerk of Oxenford ; The Sergeant of Law ; The Doctor of Physic ; The Parish Priest.

8. Explain the following words and phrases in the Prologue :—

This ilke knight, for the maistrie, alway after on, for him was lever han, ye wete your forword, a good mistere ; chevisaunce, covine, goliardeis, lodemenage, sausefleme, wastel, wonyng, halwes, parvys, achatours, lymitour, yeddynges, for-pyned, euvyned, love-days.

---

9. What are the means by which it has been attempted to determine the order in which the works of Shakespeare were written ?

What are the characteristics of the works of the early, the middle, and the advanced stage of his career as an author ?

10. How does it appear that the life and character of Julius Cæsar largely engaged the attention of Shakespeare ?

11. It was proposed to include Antony in Cæsar's doom:—What reasons does Brutus urge for exempting him from this fate ?

12. What striking testimony does Antony, at the close of the Play, bear to the character of Brutus ?

13. In what contemptuous terms does Antony, in conversation with Octavius, characterize the remaining member of the Triumvirate ?

14. Quote the refereuces that are made to Cicero in the Play.

15. Where does Shakespeare place the scene of the assassination Where did it really take place ?

16. Quote as much of Antony's great speech as you remember.

17. Explain the following passages :—

(*a*). The genius and the mortal instruments
Are then in council :

(*b*). O Conspiracy !
Sham'st thou to show thy dangerous brow by night,
When evils are most free ? O, then, by day,
Where wilt thou find a cavern dark enough
To mask thy monstrous visage ? Seek none, Conspiracy ;
Hide it in smiles, and affability :
For, if thou path thy native semblance on,
Not Erebus itself were dim enough
To hide thee from prevention.

(*c*). These crouchings, and these lowly courtesies,
Might fire the blood of ordinary men ;
And turn pre-ordinauce and first decree,
Into the law of children.

(*d*). I turn the trouble of my countenance
Merely upon myself. Vexed I am,
Of late, with passions of some difference,
Conceptions only proper to myself.

(*e*). Are you not moved, when all the sway of earth
Shakes, like a thing infirm ?

(*f*). Why, birds and beasts, from quality and kind ;
Why old men, fools, and children calculate ;
Why all these things change from their ordinance,
Their natures and preformed faculties,
To monstrous quality ;—

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18. Name the prose works of Milton in the order of their publication and note the object and occasion of each.

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Appendix, No. 2.

Sessional Examinations.

1. State the chronological limits of each of the four Periods of Poetry illustrated in Mr. Palgrave's Collection.

What phases or tendencies of thought and characteristics of style does each Period specially present?

Name the Poets who have mainly given to each its distinctive character.

2. Explain the following passages, and name their authors:—

(*a*). It is the star to every wandering bark
Whose worth's unknown, although his height be taken.

(*b*). Nativity once in the main of light
Crawls to maturity, wherewith being crown'd,
Crooked eclipses 'gainst his glory fight:

(*c*). For 'tis all one to courage high
The emulous, or enemy;
And with such, to enclose
Is more than to oppose.

(*d*). ——— the repeated air
Of sad Electra's poet had the power
To save the Athenian walls from ruin bare.

3. In a Classification of English Poetry under what head would you place L'Allégro and Il Penseroso?

What is the idea, or meaning, of each Poem?

---

4. Exhibit your acquaintance with the following passages in The Essay on Man:—

(*a*). That in which it is argued that the happiness of man depends partly upon his ignorance of future events, and partly upon the hope of a future state:

(*b*). That if man possessed any of the sensitive faculties in a higher degree, he would be miserable:

(*c*). That it is a folly to expect exceptions to general laws.

5. Define Optimism.

By whom was the doctrine propounded?
How is it expressed by Pope?

6. What objections have been made to the philosophy of The Essay on Man?

Have you noticed any inconsistencies in Pope's philosophical views?

7. Quote the references to Alexander the Great, Cromwell, Falkland, Turenne, De Moivre, Bolingbroke.

8. Explain the following passages:—

(*a*). The sponseless Adriatic mourns her lord:

(*b*). An Emperor tramples where an Emperor knelt:

(*c*). Oh for one hour of blind old Dandolo!

(*d*). These are four minds, which like the elements,
Might furnish forth creation:

(*e*). Ungrateful Florence! Dante sleeps afar,
Like Scipio, buried by the upbraiding shore:

(*f*). His day of double victory and death
Beheld him win two realms, and, happier, yield his breath.

9. Sketch the characters of Napoleon, Rousseau, Voltaire, and Gibbon, as given by Byron.

10. What internal evidence approximately fixes the date of the Fourth Canto of Childe Harold?

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11. It has been said that the method pursued in Dr. Whewell's History of the Inductive Sciences imparts to the narrative "a picturesque or rather epic interest":—Explain the remark.

12. What antagonistic theories respecting the Philosophy of Knowledge have from an early period divided the Schools?

13. Justify the assertion that "he only discovers who proves."

How is the saying applied by Whewell?

How is the genius of discovery usually manifested?

14. How does Whewell account for the fact—that in Astronomy alone, of all the provinces of knowledge, men were able, at an early and unenlightened period, to construct a science out of the obvious facts of observation?

What was the step which led to all the rest?

What was the greatest advance in the *theory* of the celestial motions made by the ancients?

15. Tennyson says:—

> Sweet Hesper-Phosphor, double name
> For what is one, the first, the last,
> Thou, like my present and my past,
> Thy place is changed; thou art the same:—

Which of the ancients is said to have first maintained that the evening and morning star are the same body?

16. Explain the following passage:—

> They pass the planets seven, and pass the fix'd,
> And that crystalline sphere whose balance weighs
> The trepidation talk'd, and that first moved.

17. Assign etymologies for the following words:—

Moon, year, harvest, Charles' Wain, colures, gnomonick, anomaly, catasterism, Almagest.

---

18. Sketch briefly the character of Edmund Burke (*a*) as a Political Philosopher; (*b*) as an Orator.

Modern History.

1. Give an account of the Petition of Right.

2. Write a brief sketch of Strafford's government of Ireland.

To what two leading grievances does Hallam trace the Irish rebellion of 1641?

3. Enumerate, in order of time, the engagements of the Civil War between Charles I. and the Parliament; and name the commanders on each side.

4. Explain the historical allusions in the following passages:—

(*a*) "What gave great Villiers to the assassin's knife,
And fixed disease on Harley's closing life?
What murdered Wentworth, and what exiled Hyde,
By kings protected, and to kings allied?
What but their wish indulged in courts to shine,
And power too great to keep, or to resign?"

(*b*) "While Darwen stream, with blood of Scots imbrued,
And Dunbar field resounds thy praises loud,
And Worcester's laureate wreath."

5. What was the peculiar characteristic of religious persecution in England under Charles II.?

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Appendix, No. 2.

Sessional Examinations.

Mention the principal intolerant Acts of Parliament passed in his reign.

What important improvements were effected in the Law during the period?

6. What is the correct meaning of the oxpression—"The Three Estates of the Realm"?

What, according to Hallam, is "the great preservation of the equilibrium in our government"?

7. State the occasion on which the names Whig and Tory were first given to political parties; and explain the application of the terms.

What, according to Hallam, is "the cardinal principle of Toryism"?

8. "The commencement of responsible government in England is the commencement of the science of finance":—Explain this statement; and name the most eminent financial ministers in English history.

9. Assign events in French History to the following years:—1589, 1598, 1642, 1685, 1715, 1793, 1804.

10. What were the great objects of the policy of Richelieu?

11. Give an account of the claims of Louis XIV. which led to the Wars of Devolution and the Spanish Succession.

12. What political combinations gave rise to the Triple Alliance?

13. By what Treaty was the War of the Spanish Succession brought to a olose?

In reference to a certain remarkable provision of this Treaty, a great orator, addressing the House of Commons, said:—"You bartered the glories of Blenheim for the traffic in blood":—What was the provision here referred to?

14. "In many respects 1740 is as important a date in the history of Western Societies as 1789":—Explain this observation.

15. Describe the battle of Fontenoy.

16. Enumerate the leading causes of the French Revolution; and state what you conceive to be its chief lessons.

17. Name the three most remarkable English publications produced by the first outbreak of the French Revolution.

18. Mention some of the principal means by which Napoleon consolidated his power.

State also what you conceive to have been the great errors of his career.

Give the substance of Hallam's comparison of Cromwell and Napoleon, with Macaulay's strictures thereon.

MODERN LANGUAGES.—*Examiner, Professor Ch. Geisler*, PH.D.

FRENCH—FIRST YEAR.

Honor Class.

1. Translate into French:—

Several companies of infantry were drawn up there, forming a double line on each side of his way; a detachment of halberdiers marched on before with banners flying; the drums beat; not a voice could be heard for the noise. On the right of the King was the bishop; on the left, uncovered, Colonel Tomlinson, the officer in command of the guard, whom Charles, touched by his attentions, had requested not to leave him till the last moment. He talked with him on the way of his funeral, of the persons to whom he wished the care of it to be intrusted, his countenance serene, his eye beaming, his step firm, walking even faster than the troops and blaming their slowness.

To whomsoever you may address yourself, you will obtain nothing.

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Appendix, No. 2.

Sessional Examinations.

Whatsoever may happen to you, do not be discouraged. However pretentions these gentlemen may be, yet they know very little. However opposed our opinions may be, let us not hate each other. Whosoever may have told you that, I do not believe it. Which victory has the army gained? Which letter have you written? Which towns have you seen?

2. Distinguish between "une fausse clef," "une clef fausse;" "une fausse porte," "une porte fausse;" "un honnête homme," "un homme honnête;" "une pauvre langue," "une langue pauvre;" "un plaisant homme," "un homme plaisant."

3. Mention some of the most important phonetical processes by the means of which a great number of French words were derived from Latin. Give examples.

4. Translate the following idioms:—"Songez qu'il y va de votre fortune." "Il avait beau crier, on n'y fit pas attention." "Ils en vinrent aux mains." "Il vous en veut." "Je fais grand cas de vous." "Je pourrais me passer de cela." "Il était aux abois." "Je n'y suis pour rien." "Il vient de tomber malade." "Je vous en sais gré." "Il fut piqué au vif." "Il n'y a pas de quoi." "Ils se jetèrent sur l'ennemi à corps perdu." "Il a l'air malade." "Quand faudra-t-il aller aux voix." "Il en viendra à bout." "Cela va sans dire."

5. Translate into English:—

Ne te souvient il plus de ces temps d'épouvante,
Où de quatre-vingt-neuf résonna le tocsin?
N'était-ce pas hier? et la source sanglante,
Où Paris baptisa sa liberté naissante,
La sens-tu pas encore qui coule de ton sein?

A-t-il rassasié ta fierté vagabonde,
A-t-il pour les combats assouvi ton penchant,
Cet homme audacieux qui traversa le monde,
Pareil au laboureur qui traverse son champ,
Armé du soc de fer qui déchire et qui féconde?

S'il te fallait alors des spectacles guerriers,
Est-ce assez d'avoir vu l'Europe dévastée,
De Memphis à Moscou la terre disputée,
Et l'étranger deux fois assis à nos foyers,
Secouant de ses pieds la neige ensanglantée.

Et que voudriez-vous, Madame, que j'y fisse?
L'humeur dont je me sens veut que je m'en bannisse;
Le ciel ne m'a point fait, en me donnant le jour,
Une âme compatible avec l'air de la cour.
Je ne me trouve point les vertus nécessaires,
Pour y bien réussir, et faire mes affaires.
Etre franc et sincère est mon plus grand talent;
Je ne sais point jouer les hommes en parlant;
Et qui n'a pas le don de cacher ce qu'il pense
Doit faire en ce pays fort peu de résidence.
Hors de la cour, sans doute, on n'a pas cet appui,
Et ces titres d'honneur qu'elle donne aujourd'hui;
Mais on n'a pas aussi, perdant ces avantages,
Le chagrin de jouer de fort sots personages:
On n'a point à souffrir mille rebuts cruels,
On n'a point à louer les vers de Messieurs tels,
A donner de l'encens à Madame une telle
Et de nos francs marquis essuyer la cervelle.

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Appendix, No. 2.

Sessional Examinations.

Pass Class.

1. Translate into English:—

Il était bon ingénieur lui-même; mais surtout il excellait dans tous les arts de la marine; bon capitaine de vaisseau, habile pilot, bon matelot, adroit charpentier, et d'autant plus estimable dans ces arts qu'il était né avec une crainte extrême de l'eau; il ne pouvait dans sa jeunesse passer sur un pont sans frémir; il faisait fermer alors les volets de bois de son carrosse; le courage et le génie domptèrent en lui cette faiblesse machinale. Pierre forma d'abord une compagnie d'étrangers dans laquelle il s'enrôla lui-même, et ne dédaigna pas de commencer par être tambour et d'en faire les fonctions; tant la nation avait besoin d'exemples. Il fut officier par degrés. Il fit petit à petit de nouveaux régiments; et enfin, se sentant maître de troupes disciplinées, il cassa les strélitz qui n'osèrent désobéir.

Quoique doux dans son enfance, il avait une opiniâtreté insurmontable; le seul moyen de le plier était de le piquer d'honneur; avec le mot de gloire on obtenait tout de lui. Il avait de l'aversion pour le latin; mais dès qu'on lui eut dit que le roi de Pologne et le roi de Danemarck l'entendaient, il l'apprit bien vite et en retint assez pour le parler le reste de sa vie. On s'y prit de la même manière pour l'engager à entendre le français; mais il s'obstina tant qu'il vécut à ne jamais s'en servir, même avec des ambassadeurs français qui ne savaient point d'autre langue. "Je n'ai presque connu le roi de Suède que par la défaite de Pultava et par la prière qu'il m'a faite de lui accorder un asile dans mon empire; je n'ai, je crois, nul besoin de lui et n'ai sujet ni de l'aimer ni de le craindre; cependant, sans consulter d'autres motifs que l'hospitalité d'un musulman et ma générosité qui répand la rosée de ses faveurs sur les grands comme sur les petits, sur les étrangers comme sur mes sujets, je l'ai reçu et secouru de tout, lui, ses ministres, ses officiers, ses soldats, et n'ai cessé pendant trois ans et demi de l'accabler de présents."

2. Translate into French:—

Have you told him to come? Where do you buy your books? Have you been at the post office? I shall go there immediately. Do you know your lesson? I believe that I know it. Do you know these gentlemen? It is a long time since I have seen them. Have you spoken to him of their business? We had no time to speak to him about it. When will they come to see us? I hope they will come to-night. Have you lost something? I lost nothing. Why does she open the window? I have two good man-servants. Are they as good as mine? I have read the books which you have lent me. I do not eat because I am not hungry. What will you do next week? He died suddenly. How do you do? Where does your friend live now? I cannot tell you. Do you find what you seek? What o'clock is it? What has the Englishman answered to you? Have you still some money? No, I have not. Will you drink red wine? I prefer the white wine. I have told her that I would go away before her, and she has allowed it to me. You ought to come at two o'clock. Why do you not come when I call you? I hope that you will keep your word, and that you will come to-morrow. My mother was born in England. I understand every word. We drink fresh water. He did not believe what I said. Put out the light and go to bed.

3. Give the second person plural of the present and future tenses of the following verbs:—*finir, sortir, mentir, sentir, blanchir, adoucir,*

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vieillir, courir, mourir, dormir, lire, dire, construire, instruire, détruire, établir, punir, réduire. Appendix, No. 2.

4. There are a great many verbs in *ir* formed from the feminine of adjectives, as above—*blanchir, adoucir, vieillir.* Enumerate as many of them as you know. Sessional Examinations.

GERMAN—JUNIOR CLASS.

1. Translate into English :—

Der König tritt zurück mit Grauen.
"Doch warn' ich Dich dem Glück zu trauen"
Versetzt er mit besorgtem Blick.
"Bedenk, auf ungetreuen Wellen—
Wie leicht kann sie der Sturm zerschellen—
Schwimmt deiner Flotte zweifelnd Glück."

"Was wollt ihr?" ruft er vor Schrecken bleich,
"Ich habe nichts als mein Leben,
Das muss ich dem Könige geben!"
Und entreisst die Keule dem Nächsten gleich :
"Um des Freundes willen, erbarmet euch!"
Und drei mit gewaltigen Streichen
Erlegt er, die andern entweichen.

Und den Mordstahl seh' ich blinken,
Und das Mörderauge glühn;
Nicht zur Rechten, nicht zur Linken
Kann ich vor dem Schreckniss fliehn;
Nicht die Blicke darf ich wenden,
Wissend, schauend, unverwandt
Muss ich mein Geschick vollenden
Fallend in dem fremden Land.

Und mit Erstaunen und mit Grauen
Sehen's die Ritter und Edelfrauen,
Und gelassen bringt er den Handschuh zurück.
Da schallt ihm sein Lob aus jedem Munde,
Aber mit zärtlichem Liebesblick—
Er verheisst ihm sein nahes Glück—
Empfängt ihn Fräulein Kunigunde.
Und er wirft ihr den Handschuh in's Gesicht :
"Den Dank, Dame, begehr ich nicht!"
Und verlässt sie zur selben Stunde.

Und von ihrem Gott ergriffen,
Hub sich jetzt die Seherin;
Blickte von den hohen Schiffen
Nach dem Rauch der Heimath hin.
Rauch ist alles ird'sche Wesen;
Wie des Dampfes Säule weht,
Schwinden alle Erdengrössen,
Nur die Götter bleiben stät.

Wie sprang, von kühnem Muth beflügelt;
Beglückt in seines Traumes Wahn,
Von keiner Sorge noch gezügelt,
Der Jüngling in des Lebens Bahn.

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Appendix, No. 2.

Sessional Examinations.

Bis an des Aethers bleichste Sterne
Erhob ihn der Entwürfe Flug;
Nichts war so hoch und nichts so ferne,
Wohin ihr Flügel ihn nicht trug.

2. Give the English and the principal tenses of the following verbs:—*Ziehen, sterben, denken, bringen, giessen, finden, gehen, kommen, sprechen, steigen, leiden, nehmen, greifen, schlagen, fallen, tragen, gerathen, verzeihen, zwingen, schwimmen, stehen, geben, schweigen, lassen.*

3. Explain the chief rules on the position of verbs in German sentences, and illustrate them by examples.

4. Translate into German:—

I have recommended him to watch over him. They advised me yesterday to give up a part of my rights. If I took these books my father would scold me. My brother will not be able to come. We went to church. I should willingly go to walk if you would go with me. I believe that your friends are gone away already. I should wish to be able to serve you. My sister hopes that you will do what you have promised her. When you must go to school you always look for some pretext. I cannot get up to-day; I have headache. He who is not for me is against me. My sister will be happy to see you again.

5. Which are the various meanings and uses of the prefix *ge* which occurs in such manifold combinations with nouns, verbs, and adjectives, in the German language? Illustrate each particular variety by good examples.

FRENCH—SECOND YEAR.

1. Explain in French the following proverbs:—

"Un tiens vaut mieux que deux tu l'auras." "Tant va la cruche à l'eau qu'à la fin elle se brise." "Faites-vous brebis, le loup vous mangera." "Pain tendre et bois vert mettent la maison au désert." "Il ne sait pas où le bât le blesse." "On lui a fait voir du pays." "C'est bonnet blanc et blanc bonnet." "Du cuir d'autrui on fait large courroie." "C'est vouloir prendre les lièvres au son du tambour." "Souris qui n'a qu'un trou, est bientôt prise." "Au royaume des aveugles les borgnes sont rois." "Coup de langue est pire que coup de lance." "Il tue la poule pour avoir l'œuf." "A trompeur trompeur et demi." "Qui s'acquitte, s'enrichit." "L'habit ne fait pas le moine." "Qui ne dit mot, consent."

2. Translate into French:—

They resorted to acts of violence. They had a narrow escape. He turned a deaf ear to all I said. The die is cast. I shall be back towards dusk. I do not want to be your scapegoat. This is of the greatest consequence. He is very well read. Which lectures are you going to attend next session? The stationmaster told me that the express train would start after the luggage train. He has told me nice stories on his account. Though I asked him to be quiet, he used more than ever coarse language towards me. Why do you shrug the shoulders? I suppose you go hand in hand. The whole garrison was slaughtered. Do not trouble yourself about the consequences. I am quite willing. He was seized in the very act. He gave a house-warming. You have full play. He hurried away at full speed. He is over head and ears in debt. He did it of his own accord. The reopening of the classes will take place next week. They are upon terms of intimacy with most of the families of the neighbourhood. He enjoyed himself to his heart's content.

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Appendix, No. 2.

Sessional Examinations.

3. Give the etymology of—

Ambassadeur, baron, fâcher, amiral, bailli, abandonner, bachelier, bâiller, blé, chagrin, chicane, comble, dîner, douane lierre, foie, finance, tombe, galimatias, ruse, souci, polisson. regret, prêtre, percer, émoi, bonheur, aise, érable, abricot, arsenal, reprocher, carême, ruban, rue.

4. Which is, in your opinion, the most stirring moment in the tragedy of "Merope" by Voltaire?

5. Translate into English the following passage of "Phèdre," and write in French a brief commentary on it:—

Ils s'aimeront toujours!

Au moment que je parle, ah, mortelle pensée!
Ils bravent la fureur d'une amante inseusée:
Malgré ce même exil qui va les écarter,
Ils font mille serments de ne se point quitter.
Non, je ne puis souffrir un bonheur qui m'outrage,
Oenone, prends pitié de ma jalouse rage,
Il faut perdre Aricie, il faut de mon époux
Contre un sang odieux réveiller le courroux:
Qu'il ne se borne pas à des peines légères;
Le crime de la soeur passe celui des frères.
Dans mes jaloux transports je le veux implorer.
Que fais-je? où ma raison va-t-elle s'égarer?
Moi, jalouse! et Thésée est celui que j'implore.
Mon époux est vivant et moi je brûle encore!
Pour qui? quel est le cœur où prétendent mes voeux?
Chaque mot sur mon front fait dresser mes cheveux,
Mes crimes désormais ont comblé la mesure:
Je respire à la fois l'inceste et l'imposture;
Mes homicides mains, promptes à me venger,
Dans le sang innocent brûlent de se plonger.
Misérable! Et je vis! Et je soutiens la vue.
De ce sacré soleil dont je suis descendue!
J'ai pour aïeul le père et le maître des dieux;
Le ciel, tout l'univers est plein de mes aïeux;
Où me cacher? Fuyons dans la nuit infernale.
Mais que dis-je! mon père y tient l'urne fatale;
Le sort, dit-on, l'a mise en ses sévères mains:
Minos juge aux enfers tous les pâles humains.
Ah! combien frémira son ombre épouvantée
Lorsqu'il verra sa fille, à ses yeux présentée
Contrainte d'avouer, tant de forfaits divers,
Et des crimes peut-être inconnus aux enfers!
Que diras-tu, mon père, à ce spectacle horrible?
Je crois voir de ta main tomber l'urne terrible;
Je crois te voir, cherchant un supplice nouveau,
Toi-même de ton sang devenir le bourreau.
Pardonne: Un dieu cruel a perdu ta famille:
Reconnais sa vengeance aux fureurs de ta fille.
Hélas! Du crime affreux dont la honte me suit
Jamais mon triste cœur n'a recueilli le fruit:
Jusqu'au dernier soupir de malheurs poursuivie,
Je rends dans les tourments une pénible vie.

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Appendix, No. 2.

Sessional Examinations.

THIRD YEAR.

1. Write a brief commentary in French on the following passage of Boileau :—

Enfin Malherbe vint; et le premier en France
Fit sentir dans les vers une juste cadence,
D'un mot mis en sa place enseigna le pouvoir
Et réduisit la muse aux règles du devoir.
Par ce sage écrivain la langue réparée.
N'offrit plus rien de rude à l'oreille épurée.
Les stances avec grâce apprirent à tomber,
Et le vers sur le vers n'osa plus enjamber.
Tout reconnut ses lois; et ce guide fidèle
Aux auteurs de ce temps sert encore de modèle.
Marchez donc sur ses pas; aimez sa pureté,
Et de son ton heureux imitez la clarté.

2. Compare the expression of the idea of suicide in ancient and modern literature. Take, for this purpose, Phèdre of Racine, Hamlet, Chatterton of Alfred de Vigny, Werther of Goethe, and oppose them to the Ajax of Sophocles, the Dido of the Æneis.

3. How far can the difference of the ideals of the classic and romantic schools be recognised, when you compare the maternal love as expressed in the *Meropes* of Maffei, Voltaire, the *Andromaque* of Racine, to the development of the same feeling in the *Lucrèze Borgia* of Victor Hugo?

4. What kind of style is understood by "le marivaudage"?

5. How has Montaigne been judged by Balzac, by Port Royal, La Bruyère, La Fontaine, Voltaire, Montesquieu, and Rousseau?

6. Illustrate the character of Rabelais' humour as contrasted with the wit of Voltaire.

7. What kind of dramatic reform was undertaken by Diderot? Appreciate its merits. Did Beaumarchais try to follow his steps?

8. How did Napoleon employ his influence with regard to the dramatic literature of his time?

9. What is meant by "la faculté maîtresse" recommended by Taine as the chief criterion of truth in literary judgments?

10. Subject for Essay :—The Conquests of Alexander the Great.

GERMAN—THIRD YEAR.

I.—Translate into German :—

Either side was prepared for the most determined struggle. The last hope of the Hellenes rested in the annihilation of the foe; and behind them stood on the heights of Salamis their wives and children, whom the most terrible doom of slavery awaited if a complete victory should not be obtained. In the rear of the Persian fleet, on the projection of Mount Aegaleus, was erected the silver-footed throne of the great king. There he sat in the midst of his troops, surrounded by councillors and scribes, near enough to overlook the waters, within the narrow limits of which hundreds of thousands were crowded together for battle, and ready to dispense on the spot rich rewards or the most fearful punishment. The commander of every vessel fancied the royal eye to be upon him; so that the promptings of ambition were aroused, particularly among the Tonians, of whom only a few purposely remained behind. Hence it was the Persians who, with great vehemence, made the first general attack.

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The Hellenes retreated upon Salamis, but in perfect order, the prows of their vessels remaining turned towards the enemy. Then they again slowly advanced, the Athenians and Aeginetans in the van.—CURTIUS' *History of Greece.*

II.—Translate into English :—

Unglücklicher, ich löse Deine Bande
Zum Zeichen eines schmerzlichern Geschicks.
Die Freiheit, die das Heiligthum gewährt,
Ist, wie der letzte lichte Lebensblick
Des schwer Erkrankten, To des bote. Noch
Kann ich es mir und darf es mir nicht sagen,
Dass ihr verloren seid! Wie könnt' ich euch
Mit mörderischer Hand dem Tode weihen?
Und niemand, wer es sei, darf Euer Haupt
So lang ich Priesterin Dianens bin,
Berühren : Doch, verweigr' ich jene Pflicht
Wie sie der aufgebrachte König fordert ;
So wählt er eine meiner Tungfraun mir
Zur Folgerin, und ich vermag alsdann
Mit heissem Wunsch allein Euch beizustehn.
O werther Landsmann! Selbst der letzte Knecht,
Der an den Herd der Vatergötter streifte,
Ist uns in fremdem Lande hoch willkommen :
Wie soll ich Euch genug mit Freud' und Segen
Empfangen, die ihr mir das Bild der Helden,
Die ich von Eltern her verehren lernte,
Entgegenbringet und das innre Herz
Mit neuer schöner Hoffnung schmeichelnd labet!

Iphigenie auf Tauris, von GOETHE.

HONORS—FIRST YEAR.

Examiner, Professor Allman, LL.D.

1. The sides of a triangle pass through three given points in a straight line, while two of its vertices move on given straight lines : find the locus of the third vertex.

2. Through a given point draw a straight line so that the sum of the squares of the perpendiculars let fall on it from two given points shall be given.

3. Find the relation which connects the cosines of three angles whose sum is four right angles. Apply this formula to investigate the relation between the respective distances of any four points in the same plane.

4. Sum the following series :—

$$\cos\theta + \tfrac{1}{3}\cos 3\theta + \tfrac{1}{5}\cos 5\theta + \cdots\cdots;$$
$$\sin\theta + \tfrac{1}{3}\sin 3\theta + \tfrac{1}{5}\sin 5\theta + \cdots\cdots.$$

5. Prove Lhuillier's theorem for the spherical excess—

$$\tan\tfrac{1}{4}E = \sqrt{\{\tan\tfrac{1}{2}s\tan\tfrac{1}{2}(s-a)\tan\tfrac{1}{2}(s-b)\tan\tfrac{1}{2}(s-c)\}}.$$

6. In a spherical triangle prove that the product of the sines of the segments of the base made by the inscribed circle is equal to the

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Appendix, No. 2.

Sessional Examinations.

product of the sines of the perpendiculars let fall from the extremities of the base on the bisector of the vertical angle.

7. Find in terms of m and a the roots of the equation—

$$x^4 + pax^3 + (m^2 + m)a^2x^2 + qa^3x + a^4 = 0,$$

which are in geometrical progression; and determine p and q in terms of m and a.

8. Show that the equation $ax^3 + bx^2 + cx + d = 0$ will have equal roots if $(ad - bc)^2 - 4(b^2 - ac)(c^2 - bd) = 0$.

9. Calculate the value of the determinant

$$\begin{vmatrix} 1, & 1, & 1, & 1 \\ \alpha, & \beta, & \gamma, & \delta \\ \alpha^2, & \beta^2, & \gamma^2, & \delta^2 \\ \alpha^3, & \beta^3, & \gamma^3, & \delta^3 \end{vmatrix}.$$

10. Find the polar equation of the straight line passing through the points whose polar co-ordinates are ρ', θ' and ρ'', θ''.

11. Prove that the area of the triangle formed by the straight lines $y = x\tan\alpha$, $y = x\tan\beta$, $y = x\tan\gamma + c$, is $\frac{c^2}{2}\frac{\sin(\alpha-\beta)\cos^2\gamma}{\sin(\alpha-\gamma)\sin(\beta-\gamma)}$.

12. Through the intersection of two circles a straight line is drawn: find the locus of the middle points of the portion intercepted between the circles.

Second Year.

Examiner, Professor Allman, LL.D.

1. Investigaetthe condition which must be satisfied in order that the general equation of the seceond degree shall represent two straight lines.

2. Find the locus of enteih trsection of tangents to a parabola which cut at a given angle.

3. Investigate the equation of a conic section referred to two tangents as axes of co-ordinates.

4. Two equal parabolas in the same plane, are placed so as to touch at their vertices; if one rolls on the other, find the locus of its focus and directrix.

5. If $u = e^{ax}\cos bx$, and $\tan\phi = \frac{b}{a}$; prove that

$$\frac{d^n u}{dx^n} = (a^2 + b^2)^{\frac{n}{2}} e^{ax}\cos(bx + n\phi).$$

6. State and prove Lagrange's theorem on the limits of Taylor's theorem.

7. Transform $\frac{d^2\phi}{dx^2} + \frac{d^2\phi}{dy^2} = 0$, being given $x^2 + y^2 = r^2$.

8. Find the co-ordinates of the centre of curvature of the catenary: show that the radius of curvature of this curve is equal but opposite to the normal.

9. Find the envelope of the curves $y = x\tan\alpha - \frac{x^2}{4h\cos^2\alpha}$, α being the variable parameter.

10. Investigate the conditions under which $\int \sin^m x\cos^n x dx$ can be found immediately. When none of these conditions are satisfied, how may the reduction of this integral be effected?

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11. Find the area of the cissoid, $\{y^2(2a-x)=x^3\}$.

Show that the whole area included between the asymptote and the two branches of the curve is $3\pi a^2$.

12. Find the following integrals :

$$\int \frac{e^x x dx}{(1+x)^2}; \qquad \int_0^{2a} x^2 \operatorname{vers}^{-1}\frac{x}{a}\,dx; \qquad \int \frac{dx}{(a+bx)\sqrt{m+nx}}.$$

THIRD YEAR.

Examier, Professor Allman, LL.D.

1. Find the direction-cosines of a line perpendicular to two given lines.

2. Define a plane, and prove that its equation is of the first degree. Find the equation of a plane passing through three points, and determine the geometrical signification of the constants in the equation.

3. Prove that a surface of the second degree has in general three principal diametral planes.

4. Find the area of the section of the ellipsoid $\frac{x^2}{a^2}+\frac{y^2}{b^2}+\frac{z^2}{c^2}-1$, made by the plane $lx+my+nz=p$.

5. Find the differential equation of the envelope of a sphere of constant radius whose centre moves on any curve.

6. Define a line of curvature on a surface. Find the differential equation of the lines of curvature of the ellipsoid $\frac{x^2}{a^2}+\frac{y^2}{b^2}+\frac{z^2}{c^2}=1$.

7. Integrate the differential equations—

$$(y-x)\,(1+x^2)^{\frac{1}{2}}dy - n(1+y^2)^{\frac{3}{2}}dx = 0\,; \quad x\frac{dy}{dx}+y=y^2\log x\,;$$

$$\frac{d^2y}{dx^2}-\frac{2}{x}\frac{dy}{dx}+\frac{2}{x^2}y=\frac{4}{x^2}.$$

8. Show that the curve in which the radius of curvature varies as the cube of the normal is a conic section.

9. Find the equation of a surface which belongs at once to surfaces of revolution defined by the equation $py-qx=o$, and to conical surfaces defined by the equation $px+qy=z$.

10. Integrate the partial differential equations—

$$x^2\frac{dz}{dx}+y^2\frac{dz}{dy}=\frac{x^3}{y}\,; \quad x\frac{dz}{dx}+y\frac{dz}{dy}+t\frac{dz}{dt}=az+\frac{xy}{t}.$$

SECOND YEAR'S ARTS AND ENGINEERING—HONORS.

MIXED MATHEMATICS—*Examiner, Professor Curtis,* LL.D.

1. Prove that, if any system of parallel forces all situated in a plane be in equilibrio with another system of parallel forces also situated in the plane, each system is either equivalent to a couple, or is singly in equilibrio.

2. Find the condition of equilibrium of a material point placed on a rough inclined plane, and acted on by a force making a given angle with the plane—the greatest possible amount of friction being called into play.

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Appendix, No. 2.

Sessional Examinations.

3. A heterogeneous sphere rests on two rough inclined planes; find the limiting positions of equilibrium.

4. A homogeneous cone rests with its base on a rough inclined plane, the plane is gradually raised, and it is found that toppling and sliding motion take place simultaneously, if α be the semiangle of the cone, and μ the coefficient of friction, prove that $4 \tan \alpha = \mu$.

5. Find the centre of gravity of a trapezium, also of a triangular prism—the two bounding plane surfaces of which are parallel.

6. Find the locus of all points, the time of descent rectilinearly from which to one of two given points is in a given ratio to the time of descent to the other.

7. Prove that the path of a projectile is a parabola.

8. Find the centre of pressure of a parallelogram sunk in water in such a way that one diagonal is horizontal.

9. Determine the total pressure on a plane area bounded by a parallelogram, the angles of which are sunk to depths h_1, h_2, h_3, h_4. What condition exists between these depths?

10. A sphere of radius r is sunk in a homogeneous liquid, its centre being at a depth, h, below the free surface; prove that the total pressure is to the resultant pressure as $3h : r$.

11. Show that the image formed by a concave reflector is sometimes erect, and sometimes inverted, and determine the condition in each case.

12. Light passes from one medium into another the surface of separation being spherical, and the angle of incidence nearly 90°; determine the relation between the conjugate foci. Hence deduce the formula connecting the conjugate foci of a *thin* lens, also of a lens bounded by two concentric spherical surfaces.

Second Year's Arts.

Mixed Mathematics.—*Examiner, Professor Curtis*, LL.D.

1. Find the resultant of two forces of 10 lbs. and 7 lbs.
   (*a.*) If they be parallel, and acting at a distance of 3 feet (1) in the same direction; (2) in opposite directions.
   (*b.*) If they intersect at an angle (1) of 90°, (2) of 60°, (3) of 45°, (4) of 30°.
2. Determine the mechanical advantage of:—
   (*a.*) The simple wheel and axle.
   (*b.*) The compound wheel and axle.
   (*c.*) The simple screw.
   (*d.*) Hunter's screw.
3. Find the space described by a heavy body falling freely, and starting from rest—
   (*a.*) In ten seconds.
   (*b.*) In the tenth second.
4. Prove the formula $v^2 - v_0^2 = 2fs$, and explain its precise meaning.
5. An area including a square foot is sunk in a liquid, whose specific gravity=1·2, so that its centre of gravity is at the depth of 9 feet; calculate the pressure to which it is exposed.
6. Find the centre of pressure of a triangle, whose base is situated in the free surface of the liquid in which it is immersed.
7. Find the principal focus of a spherical reflector.
8. Deduce the formula for the deviation produced by a prism of small angle on a ray of light which meets it at nearly a right angle.

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Third Year's Arts.

Mixed Mathematics.—*Examiner, Professor Curtis,* LL.D.

1. Find the points on a smooth surface, $\frac{x^n}{a^n}+\frac{y^n}{b^n}+\frac{z^n}{c^n}=1$, where a particle attracted to the origin by any force shall be in equilibrium.

2. If the surface in last question be rough, prove that the particle will be in the state bordering on motion if placed anywhere on the curve of intersection of the surface with a certain cone of the degree $2n$.

3. Prove that it is possible to determine equations sufficient to fix the position of equilibrium of a homogeneous heavy string of given dimensions and weight, whose extremities are confined, each to a given smooth curve, the entire system being contained in a vertical plane. Extend your solution to the case, where the curves are rough, and the limiting positions of equilibrium are sought.

4. The density of a triangular plate varies as the nth power of the distance from the base: determine n, when the C G of the plate divides the line joining the vertex with the middle point of the base : : m : 1.

5. Apply Dalembert's principle to determine the equations of motion of a material point acted on by any forces, and constrained to a given smooth surface. Prove that, if no forces act, the path is a geodetic curve.

6. Explain Newton's method of finding the angle between the apsides of an orbit nearly circular, and apply it to the case when force $=\frac{\mu}{r^5}$.

7. Find the law of force in the central ellipse.

8. Determine the criterion of stability of floating equilibrium; apply the result to a cone floating with its vertex submerged, and its axis vertical.

9. Find the curve, which will refract parallel rays accurately to a point.

10. Find the caustic by reflexion of a circle:—

(*a.*) Incident rays being parallel.

(*b.*) Incident rays diverging from a point on the circumference of the circle.

Third Year's Arts and Second Year's Engineering.

Experimental Physics.—*Examiner, Professor Curtis,* LL.D.

1. Establish by *a priori* reasoning the principle of Archimedes, and describe the experiment by which it is illustrated.

2. How is the existence of capillary phenomena reconcilable with the law that in a heavy fluid the pressure throughout a horizontal level is constant?

3. Determine the force necessary to separate a pair of Magdeburgh hemispheres containing rarefied air, the internal and external radii being known.

4. Describe the various experiments by which the formula—

$$n=\frac{1}{2rl}\sqrt{\frac{P}{\pi d}},$$

which expresses the law of the *transverse* vibrations of strings, may be verified. How do the *longitudinal* vibrations of strings differ from the *transverse*? Give the laws.

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Appendix, No. 2.

Sessional Examinations.

5. Determine the length of any open, and of a closed, tube which would resound to a tuning fork performing 440 vibrations per second, assuming that the velocity of sound in air is 1,125 feet per second.

6. In all cases of simple vibratory motion, to what is the intensity proportional? From what experimental datum is this result deduced? Give the process of deduction.

7. By what experiments did Despretz determine the latent heat of vapour?

8. Describe the experiments by which Coulomb established the law of Electrical Repulsion? What objections are urged against the law? Answer them.

9. By what experiment is it proved that the charges on the two surfaces of a Leyden jar, or electrical pane, are not equal? Why is this so?

10. Deduce Biot's law connecting the Dip, and the Magnetic Latitude.

11. Establish the law in the Sine-galvanometer, and in the ordinary Tangent-galvanometer, and describe the mode of using each.

12. A rigid system consists of two magnetic needles of different lengths and intensities, their centres lie in the same vertical round which the whole is free to revolve; prove that it has two positions of equilibrium —one stable, the other unstable.

Third Year's Engineering.

Applied Natural Philosophy.—*Examiner, Professor Curtis,* LL.D.

1. Calculate the H.P. of an engine which will raise in ten minutes 800 cubic feet of water from a depth of 700 feet.

2. Explain exactly why a buttress strengthens a wall, and deduce the conditions of stability of a wall supported at equal intervals by buttresses of given dimensions. What is the peculiarity of the Gothic buttress?

3. Enumerate the several ways in which the consideration of friction modifies the condition of equilibrium in the screw-press, and deduce a formula for the mechanical advantage, taking them all into account.

4. Explain the difference between the manner in which sliding motion affects the wheel of a locomotive engine, and that of a carriage drawn by it.

5. Give the reason why a carriage is easier drawn if the wheels be of large than if they be of small diameter.

6. Determine the condition of stability of a vertical wall supporting a quantity of earth sloping from the top of the wall at an inclination to the horizon less than the angle of the natural slope.

7. A constant pressure P is applied along the inner edge to every foot of a wall, whose section is a rectangle; determine the *line of resistance.* How does the line of resistance solve the problem of stability?

8. Determine the positions of the crank in a high pressure engine, at which the angular velocity is maximum, and minimum:

(*a.*) If the engine be single-acting.
(*b.*) If the engine be double-acting.

Political Economy.—*Examiner, Professor Lupton,* M.A.

1. "It is an ill-wind that blows nobody any good. Everybody must live, and what would become of the glaziers if panes of glass were never broken?"

Examine this position, and point out the fallacy which it involves.

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2. Distinguish between *fixed* and *circulating* capital, and show how the conversion of circulating into fixed capital may injuriously affect the labouring classes.

3. With what different significations is the term *wages* used by political economists? In which sense does Ricardo use the term when he says the rate of profit depends on wages?

Establish this proposition.

4. State succinctly the laws which determine the rate of wages.

5. State and contrast the laws which regulate the value of agricultural and manufactured produce respectively.

6. One of two things commands, on an average, a greater value than the other. In what different ways may the fact be accounted for?

7. How would you determine the limit beyond which, in any community, the extension of agricultural industry cannot be profitably pushed?

8. What are the functions of *money*, and what are the laws which regulate its value?

9. Enumerate and explain the several contrivances by which the use of money is economized.

10. What are the circumstances on which, in any given country, the cost of its imports depends?

11. Explain and illustrate the difference between the *real* and *nominal* exchange.

12. "Money is a fraction easier. The demand has been quite moderate in extent, while the supply offering has been very abundant. The official rate of discount remains at 3 per cent., but business is doing in the outside market at $2\frac{3}{4}$ to $2\frac{7}{8}$. The weekly return of the Bank shows a further increase in the bullion and reserve figures. The stock of specie is returned as £21,952,000, or £142,000 more than a week ago, and the notes in circulation at £22,844,000, or £171,000 less than the previous account. The resources of the banking department have been augmented by an increase of £703,000 in the public deposits, a decrease of £513,000 in the bills under discount, and an increase of £42,000 in the "rest;" and diminished by a reduction of £872,000 in the public deposits, an increase of £40,000 in the Government securities, and a decrease of £34,000 in the issue of seven-day and other bills; the net result being an addition of £313,000 to the reserve, which now stands at £14,108,000, against liabilities amounting to £32,254,000, inclusive of nearly twenty millions of private deposits. The return of the Bankers' Clearing-house is £76,760,000, against £67,377,000 in the corresponding week of last year."

Carefully explain the several statements in the above *monetary return* for the week ending 25th March, 1871.

Faculty of Medicine.

Natural Philosophy.—*Examiner, Professor Curtis*, LL.D.

1. Determine the resultant in magnitude of two forces 25 lbs. and 34 lbs. acting at an angle:—(1) of 90°, (2) of 60°, (3) of 45°, (4) of 30°, (5) in parallel directions separated by an interval of 4 ft. 11 in., and acting concurrently.

2. Determine the condition of equilibrium of a heavy body placed on

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an inclined plane, and supported by a force acting :—(1) parallel to the length of the plane; (2) parallel to the base of the plane.

3. Deduce the equation of equilibrium in the Bramah press from the principle of work.

4. How is the degree of exhaustion produced by an air-pump generally indicated?

5. Describe the action of a siphon, and give the condition necessary in order that it should act.

6. Fill up the blanks in the following table :—

Fahrenheit.	Centigrade.	Reaumur.
49°	—	—
20°	—	—
—	20°	—
—	5°	—
—	—	24°
—	—	8°

7. How may the existence of nodes in organ pipes be exhibited?

8. Explain the principle of the simple microscope.

9. How may it be shown that the positive and negative charges on the two surfaces of a Leyden jar are not identical in amount.

10. What experiments disprove Volta's theory of current electricity?

CHEMISTRY.—*Professor Rowney*, PH.D.

1. What reaction takes place when hydrochloric acid is heated with manganese dioxide, give the reaction in symbols?

2. Describe the mode of preparation and the properties of oxygen gas.

3. How is chloride of lime obtained, and to what uses is it applied.

4. What is the formula of aldehyde, and how is it obtained?

5. Give a description of water, its composition and properties.

6. How is amorphous phosphorus obtained.

7. What is meant by capillary attraction?

8. What is the composition of acetic acid, and how is it obtained?

9. What reaction takes place when chlorine gas is passed into a solution of ammonia?

10. Describe the method of obtaining, and the properties of nitric acid.

11. Give the composition and properties of the compound formed by burning sulphur in oxygen gas.

12. What is the composition of marsh gas, and where is it found naturally.

GEOLOGY.—*Professor William King*, D.SC.

1. Give a tabular view of the various geological systems and formations.

2. Make a section showing anticlinal and synclinal axes, denudation, and faulting.

3. Describe granite, limestone, gneiss, shale, and porphyry; and classify these rocks according to their origin.

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4. Describe a spirifer, productus, trilobite, pentacrinite, and an ammonite; and state their geological range respectively.

5. Describe sigillaria and lepidodendron; and state the geological age in which they flourished.

6. Describe calcite, quartz, galena, blende and felspar.

7. Describe the systems of crystallization.

MATERIA MEDICA.—*Professor M'Coy*, F.R.C.S.I.

1. What are the separate physiological actions of jalop? What are the officinal preparations of the plant that should be selected to elicit one or other of those actions *separately*, and how would you administer the drug to *combine* them when both are required in a case?

2. What may be combined in prescription with iodine, sulphate of quinia, camphor, and corrosive chlorid of mercury, to increase their solubility in water?

3. In certain cases of homorrhage, where tannic or gallic acid would seem proper for its suppression, mention a case where *tannic* acid should be chosen, and one in which *gallic* acid would be more suitable?—and mention the difference in the administration of each separately.

4. What symptoms may arise during a medical course of arsenic, administered internally, that would demand the immediate suspension or diminution of the doses of the medicine?

5. How is the ferrum redactum prepared? Give the chemical explanation of the process. Its supposed advantages over other preparations of the metal.

6. Mention the varieties of stricture of the urethra to which the direct application of lunar caustic is almost a necessity.

7. How may a practitioner make opium act as a sedative—how as a stimulant—or as an hypnatic, or as an astringent or a diaphoretic? How to act promptly, and for a limited time, and how to act moderately, and for as long a time as is possible?

MEDICAL JURISPRUDENCE.—*Professor M'Coy*, M.R.C.S.I.

1. What casualties may cause the death of an infant, leaving out unfavourable presentations, &c., but where infanticide might be suspected unjustly.

2. How may a shot by a single bullet, make two or more holes of entrance and exit?

3. What is the safe antidote for a poisonous quantity of oxalic acid? Is the mere *neutralizing* the acid sufficient, as is the case with most other acids that form insoluble salts with alkalies?

4. What is the shortest period of utro-gestation that evidences can be obtained by a medical investigation, to prove the woman pregnant who pleads the fact to bar a sentence of execution against her for some capital crime? State the mode of inquiry or examination, and the appearance of the os uteri particularly.

5. Mention shortly the chief symptoms, &c., that distinguish the poisonous action of strychnia from tetanus.

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Sessional Examinations.

SESSIONAL EXAMINATIONS, 1872.

ENGLISH LANGUAGE.—*Examiner, Professor Moffett*, LL.D.

1. Enumerate, with historical references, the principal sources of the English Vocabulary.

2. In what parts of speech and in what classes of words have we the greatest proportion of Saxon roots?

3. The errors against Purity of language are classed under three heads:—What are these? Give examples.

4. Give rules, with examples, for the proper use of *will* and *shall*, *should* and *would*.

5. Correct or justify the following sentences:—

a. "Satan, than whom
None higher sat."

b. "By letters, dated the Third of May, we learn that the West India fleet arrived safe."

c. "What can be the cause of the Parliament neglecting so important a business?"

d. "The Megarean Sect was founded by Euclid, and were the happy inventors of logical syllogism."

e. "The House of Lords resolves."

f. "The Council were divided."

g. "Pompey as well as Cæsar were great men."

h. "Africa as well as Gaul was gradually fashioned by imitation of the capital."

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6. Explain the following passage:—"A Persian conqueror crossed the Indus, marched through the gates of Delhi, and bore away in triumph those treasures of which the magnificence astonished Roe and Bernier."

7. Macaulay refers to Montezuma and Atahualpa; with what purpose? Who were these personages?

8. Give an account of the persons and circumstances referred to in the following passages; and state whence the comparison or allusion is borrowed in each case:—

a. "His enemies accused him of personal cowardice; and he defended himself in a strain worthy of Captain Bobadil."

b. "Nothing in history or fiction, not even the story which Ugolino told in the sea of everlasting ice, approaches the horrors which were recounted by the few survivors of that night."

c. "They found the little fingers of the Company thicker than the loins of Surajah Dowlah."

9. Explain the following passage:—"Here the House stopped. They had voted the major and minor of Burgoyne's syllogism; but they shrank from drawing the logical conclusion."

10. Relate the story of Omichund; and give the substance of Macaulay's reasonings and judgment thereon.

11. In concluding his summary of Clive's career and character, Macaulay writes:—"His name stands high on the roll of conquerors. But it is found in a better list, in the list of those who have done and suffered much for the happiness of mankind." Amongst what men eminent in military and civil history does he rank him?

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12. State what you regard as the chief characteristics and merits of Macaulay's Essay on Clive; and refer to passages in support of your estimate.

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13. Write a short biography of Pope.

14. Specify the subject of each of the four Epistles.

What objections have been made to the *philosophy* of the Essay?

15. Quote some of the most striking and characteristic passages.

16. Quote the references to Socrates, Alexander, Aurelius, Bacon, Newton, and Demoivre.

17. Explain the allusions in the following passage:—

"See Falkland dies, the virtuous and the just!
See God-like Turenne prostrate on the dust!
See Sidney bleeds amid the martial strife!

. . . . . .

Why drew Marseilles' good bishop purer breath,
When Nature sicken'd, and each gale was death!
Or why so long (in life if long can be)
Lent Heav'n a parent to the poor and me?"

---

18. Enumerate the principal works, Verse and Prose, of Sir Walter Scott.

19. Explain the following passages:—

a. "Say to your sons,—Lo, here his grave,
Who victor died on Gadite wave."

. . . . . .

b. "Nor mourn ye less his perish'd worth,
Who bade the conqueror go forth,
And launch'd that thunderbolt of war
On Egypt, Hafnia, Trafalgar."

. . . . . .

c. "Record that Fox a Briton died!
When Europe crouch'd to France's yoke,
And Austria bent, and Prussia broke,
And the firm Russian's purpose brave,
Was barter'd by a timorous slave;
Even then dishonour's peace he spurn'd."

d. "As when the Champion of the Lake
Enters Morgana's fated house:"

e. "He took the Sangreal's holy quest."

20. Give the geographical positions of the following places:—Bosworth Field, Holy Isle, Compostello, Montserrat, and Loretto.

21. Give the derivations of the following words:—Morrice-pikes, pennon, sewer, squire, seneschal, wassail, leash, forayer, pilgrim, palmer.

LOGIC.—*Examiner, Professor Moffett,* LL.D.

1. Explain the exact meanings of the expressions *à priori* and *à posteriori* knowledge.

To which kind belongs our knowledge of the following facts?

(*a.*) A meteor becomes heated in passing through the air.

(*b.*) There must be either some inhabitants or no inhabitants upon Jupiter.

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2. What is meant by saying that Logic has to do with Analytic and not with Synthetic Judgments?

Enumerate the fundamental Laws of Thought employed in Reasoning.

3. State the faculties and the process employed in the formation of General Notions or Concepts.

4. Define the Predicables.

Mention the different classifications of this kind that have been proposed.

Explain the following passage:—"Of the three facts—Genus, Species, Difference—given two we infer the third."

5. Define and give the Rules of Definition and Division; and show the relation in which these processes stand to the Comprehension and Extension of Notions.

What is an Infima Species? How is it divided?

6. Draw up the scheme of Opposition; and state fully the relations it involves and the inferences it authorizes.

7. Explain the logical rule—that in controversy a Contradictory should be preferred to a Contrary Proposition.

Show by applying the Rules of Opposition that Singular Propositions are not rightly reduced to Universals.

8. Why could not *both* Rules of the First Figure be violated in any legitimate Mode?

Given either a Particular Major, or Negative Minor, in the Fourth Figure; find the Mode in each case.

9. Given O (*a.*) as Major Premise, (*b.*) as Minor Premise; determine in each case the position of the Middle Term, and thence deduce the Modes and Figures.

10. Given A and E as Conclusions; determine in each case the quantity of the Middle Term in the two Premises.

11. Examine in all the Figures the legitimacy of EAE, AEE, AAI, and IAI, assigning reasons in every case of exclusion.

12. What is the use of Reduction?

Show that Reductio ad Impossibile is applicable to all the Imperfect Modes.

How many logical axioms are involved in this process?

13. "Every true patriot is a friend to religion;
Some great statesmen are not friends to religion:
Some great statesmen are not true patriots."

Reduce the above syllogism—(*a.*) by Contraposition; and (*b.*) *ad Impossibile.*

14. State the Canons of the Hypothetical Syllogism, and expose the Fallacies incident to this mode of reasoning.

Explain the following passage:—"Conditionals may appear either as Substantive or Attributive Judgments.

15. Define and analyse the Dilemma.

State the following passage in the form of a Dilemma:—"There are two kinds of things which we ought not to fret about: what we can help and what we cannot."

What are the defects to which this mode of reasoning is liable?

16. Construct a Sorites of five Premises, and resolve it into Syllogisms. Prove the Rules of each form.

17. Define Quantification of the Predicate. How does this doctrine affect (*a.*) the number of Propositional Forms, and (*b.*) the received processes of Conversion?

18. Give the Canon of the Unfigured Syllogism, with an example.

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19. Is the following reasoning Syllogistic? If not, how can it be Reduced to Syllogistic form?

"Most men have coats;
Most men have waistcoats:
Therefore some men have both coats and waistcoats."

20. How do the Nominalists, Realists, and Conceptualists differ as to the nature of a General Notion? Name the most eminent representatives of each doctrine.

First Year—Pass.

GREEK.—*Examiner, Professor D'Arcy Thompson,* M.A.

1. Give the first persons singular of the chief tenses of the verbs:—*βάλλω—τυγχάνω—ἔρχομαι—ἵστημι—τίθημι—δίδωμι—λαμβάνω—εὑρίσκω—ἔχω—αἱρέω—ἐλαύνω—πίπτω.*

2. Write out in full, and in the contracted forms, the imperfect tenses, active and passive, of—*τιμάω—φιλέω—δηλόω.*

3. Compare (*a*) the adjectives—*μέγας—ἀγαθός—ἀληθής—γλυκύς*; and (*b*) the adverbs—*μάλα—ἀληθῶς—ἐγγύς—ἀθλίως.*

4. Decline (*a*) in the singular the nouns—*θάλασσα—ταμίας—ῥόδον—λαμπάς—κέρας*; and (*b*) in the plural the nouns—*τελώνης—παρθένος—ἀνδρίας—ποίημα—δάκρυ.*

5. Translate into Greek the following sentences:—

(*a.*) I admired those-who-were-transacting[1] the affairs of the city.
(*b.*) I admired those-who-had-transacted[2] the affairs of the city.
(*c.*) The boy was very-nearly[3] related to Socrates by birth.
(*d.*) I must set about the task immediately.
(*e.*) The man was-convicted[4] on-a-charge-of-murder.[5]
(*f.*) If the tidings[6] be true, I shall remain[7] at home.
(*g.*) I would gladly hear you conversing.[8]
(*h.*) If the tidings were true, we should remain at home.
(*i.*) If the tidings had been true, we should not have got off with-impunity.[9]
(*j.*) How much would your dog fetch,[10] if it were sold?
(*k.*) How much do you think my horse would fetch, if it were sold?
(*l.*) The enemy laid waste half the territory.

(1) Participle with definite article.
(2) Participle with definite article.
(3) Superlative of *ἐγγύς.*
(4) Second aorist of *ἁλίσκομαι.*
(5) Genitive case.
(6) *τὰ ἀγγελλόμενα.*
(7) Future of *εἰσμένω.*
(8) Participle of *διαλέγομαι.*
(9) Participle of *χαίρω.*
(10) *εὑρίσκω.*

First Year—Honors.

Examiner—Professor D'Arcy Thompson, M.A.

Translate the following passages:—

1. *καὶ τὸ μὲν πρὸς τοὺς Ἀθηναίους τοσοῦτον ἀγαθὸν εὖ βουλευομένοις εὑρίσκεται· τὴν δὲ ὑπὸ πάντων ὁμολογουμένην ἄριστον εἶναι εἰρήνην πῶς οὐ χρὴ καὶ ἐν ἡμῖν αὐτοῖς ποιήσασθαι; ἢ δοκεῖτε, εἴ τῳ τι ἔστιν ἀγαθὸν ἢ εἴ τῳ τὰ ἐναντία, οὐχ ἡσυχία μᾶλλον ἢ πόλεμος τὸ μὲν παύσαι ἂν ἑκατέρῳ, τὸ δὲ ξυνδιασώσαι, καὶ τὰς τιμὰς καὶ*

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λαμπρότητας ἀκινδυνοτέρας ἔχειν τὴν εἰρήνην, ἄλλα τε ὅσα ἐν μήκει λόγων ἄν τις διέλθοι ὥσπερ περὶ τοῦ πολεμεῖν; ἃ χρὴ σκεψαμένους μὴ τοὺς ἐμοὺς λόγους ὑπεριδεῖν, τὴν δὲ αὐτοῦ τινα σωτηρίαν μᾶλλον ἀπ' αὐτῶν προϊδεῖν. καὶ εἴ τις βεβαίως τι ἢ τῷ δικαίῳ ἢ βίᾳ πράξειν οἴεται, τῷ παρ' ἐλπίδα μὴ χαλεπῶς σφαλλέσθω, γνοὺς ὅτι πλείους ἤδη, καὶ τιμωρίαις μετιόντες τοὺς ἀδικοῦντας καὶ ἐλπίσαντες ἕτεροι δυνάμει τινὶ πλεονεκτήσειν, οἱ μὲν οὐχ ὅσον οὐκ ἠμύναντο ἀλλ' οὐδ' ἐσώθησαν, τοῖς δ' αὐτοῦ τοῦ πλέον ἔχειν πρυσκαταλιπεῖν τὰ αὑτῶν ξυνέβη. τιμωρία γὰρ οὐκ εὐτυχεῖ δικαίως, ὅτι καὶ ἀδικεῖται· οὐδὲ ἰσχὺς βέβαιον, διότι καὶ εὔελπι. τὸ δὲ ἀοτάθμητον τοῦ μέλλοντος ὡς ἐπὶ πλεῖστον κρατεῖ, πάντων τε σφαλερώτατον ὂν ὅμως καὶ χρησιμώτατον φαίνεται ἐξ ἴσου γὰρ δεδιότες προμηθίᾳ μᾶλλον ἐπ' ἀλλήλους ἐρχόμεθα.

THUCYDIDES, iv., 62.

2. ξυνέβη δὲ αὐτοῖς, ὥστε μᾶον ἐκ τῆς Πελοποννήσου στρατὸν ἐξαγαγεῖν, ἢ τῶν Λακεδαιμονίων ἐν τῷ παρόντι κακοπραγία. τῶν γὰρ Ἀθηναίων ἐγκειμένων τῇ Πελοποννήσῳ καὶ οὐχ ἥκιστα τῇ ἐκείνων γῇ, ἤλπιζον ἀποστρέψαι αὐτοὺς μάλιστα, εἰ ἀντιπαραλυπεῖν πέμψαντες ἐπὶ τοὺς ξυμμάχους αὐτῶν στρατιάν, ἄλλως τε καὶ ἑτοίμων ὄντων τρέφειν τε καὶ ἐπὶ ἀποστάσει σφᾶς ἐπικαλουμένων. καὶ ἅμα τῶν Εἱλώτων βουλομένοις ἦν ἐπὶ προφάσει ἐκπέμψαι, μή τι πρὸς τὰ παρόντα τῆς Πύλου ἐχομένης νεωτερίσωσιν· ἐπεὶ καὶ τόδε ἔπραξαν, φοβούμενοι αὐτῶν τὴν νεότητα καὶ τὸ πλῆθος (ἀεὶ γὰρ τὰ πολλὰ Λακεδαιμονίοις πρὸς τοὺς Εἵλωτας τῆς φυλακῆς πέρι μάλιστα καθεστήκει)· προεῖπον αὐτῶν ὅσοι ἀξιοῦσιν ἐν τοῖς πολεμίοις γεγενῆσθαι σφίσιν ἄριστοι, κρίνεσθαι, ὡς ἐλευθερώσοντες, πεῖραν ποιούμενοι καὶ ἡγούμενοι τούτους σφίσιν ὑπὸ φρονήματος, οἵπερ καὶ ἠξίωσαν πρῶτος ἕκαστος ἐλευθεροῦσθαι, μάλιστα ἂν καὶ ἐπιθέσθαι. καὶ προκρίναντες ἐς δισχιλίους οἱ μὲν ἐστεφανώσαντό τε καὶ τὰ ἱερὰ περιῆλθον ὡς ἠλευθερωμένοι, οἱ δὲ οὐ πολλῷ ὕστερον ἠφάνισάν τε αὐτοὺς καὶ οὐδεὶς ᾔσθετο ὅτῳ τρόπῳ ἕκαστος διεφθάρη. καὶ τότε προθύμως τῷ Βρασίδᾳ αὐτῶν ξυνέπεμψαν ἑπτακοσίους ὁπλίτας, τοὺς δ' ἄλλους ἐκ τῆς Πελοποννήσου μισθῷ πείσας ἐξήγαγεν. αὐτόν τε Βρασίδαν βουλόμενον μάλιστα Λακεδαιμόνιοι ἀπέστειλαν.

THUCYDIDES, iv., 80.

3. ὦ πόλλ' ἐγὼ μοχθηρός, ὦ πικρὸς θεοῖς,
οὗ μηδὲ κληδὼν ὦδ' ἔχοντος οἰκαδε
μηδ' Ἑλλάδος γῆς μηδαμοῦ διῆλθέ που
ἀλλ' οἱ μὲν ἐκβαλόντες ἀνοσίως ἐμὲ
γελῶσι σῖγ' ἔχοντες, ἡ δ' ἐμὴ νόσος
ἀεί τέθηλε κἀπὶ μεῖζον ἔρχεται.
ὦ τέκνον, ὦ παῖ πατρὸς ἐξ Ἀχιλλέως,
ὅδ' εἰμ' ἐγώ σοι κεῖνος, ὃν κλύεις ἴσως
τῶν Ἡρακλείων ὄντα δεσπότην ὅπλων,
ὁ τοῦ Ποίαντος παῖς Φιλοκτήτης, ὃν οἱ
δισσοὶ στρατηγοὶ χἰὼ Κεφαλλήνων ἄναξ
ἔρριψαν αἰσχρῶς ὧδ' ἔρημον, ἀργίᾳ
νόσῳ καταφθίνοντα, τῆς ἀνδροφθόρου
πλεγέντ' ἐχίδνης ἀργίῳ χαράγματι·
ξὺν ᾗ μ' ἐκεῖνοι, παῖ, προθέντες ἐνθάδε
ᾤχοντ' ἔρημον, ἡνίκ' ἐκ τῆς πουτίας
Χρύσης κατέσχον δεῦρο ναυβάτῃ στόλῳ.
τότ' ἄσμενόν μ' ὡς εἶδον ἐκ πολλοῦ σάλου
εὕδουτ' ἐπ' ἀκτῆς ἐν κατηρεφεῖ πέτρῳ.
λιπόντες ᾤχονθ', οἷα φωτὶ δυσμόρῳ
ῥᾳδίᾳ προθέντες βαιὰ καί τι καὶ βορᾶς
ἐπωφέλημα σμικρόν, οἵ' αὐτοῖς τύχοι.
σὺ δή, τέκνον, ποίαν μ' ἀνάστασιν δοκεῖς
αὐτῶν βεβώτων ἐξ ὕπνου στῆναι τότε;
ποῖ' ἐκδακρῦσοι, ποῖ' ἀποιμῶξαι κακά;
ὁρῶντα μὲν ναῦς, ἃς ἔχων ἐναυστόλουν,
πάσας βεβώσας, ἄνδρα δ' οὐδέν' ἔντοπον,

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οὐχ ὕστις ἀρκέσειεν. οὐδ' ὕστις νόσου
κάμνοντι συλλάβοιτο, πάντα δὲ σκοπῶν
εὕρισκον οὐδὲν πλὴν ἀνιᾶσθαι παρὸν,
τοὐτου δὲ πολλὴν εὐμάρειαν, ὦ τέκνον.

SOPHOCLES—*Philoctetes*, 254–284.

4. λόγῳ μὲν ἐξίκουσ', ὅπωπα δ' οὐ μάλα,
τὸν πελάταν λέκτρων ποτὲ τῶν Διὸς
Ἰξίον ἰὼν' ἄμπυκα δὴ δρομάδ' ὡς ἔβαλ' ὁ παγκρατὴς Κρόνου παῖς·
ἄλλον δ' οὔτιν' ἔγωγ' οἶδα κλύων οὐδ' ἐσιδὼν μοίρᾳ
τοῦδ' ἐχθίονι συντυχόντα θνατῶν,
ὃς οὔτ' ἔρξας τιν' οὔτε νοσφίσας,
ἀλλ' ἴσος ὢν ἴσοις ἀνήρ,
ὠλέκεθ' ὧδ' ἀτίμως. τόδε τοι θαῦμά μ' ἔχει,
πῶς ποτε πῶς ποτ' ἀμφιπλήκτων ῥοθίων μόνος κλύων,
πῶς ἄρα πανδάκρυτον οὕτω βιοτὰν κατέσχεν·
ἵν' αὐτὸς ἦν πρόσουρος, οὐκ ἔχων βάσιν,
οὐδέ τιν' ἐγχώρων κακογείτονα,
παρ' ᾧ στόνον ἀντίτυπον βαρυβρῶτ' ἀποκλαύσειεν αἱματηρόν·
ὃς τὰν θερμοτάταν αἱμάδα κηκιομέναν ἑλκέων
ἐνθήρου ποδὸς ἠπίοισι φύλλοις
κατευνάσειεν, εἴ τι ἐμπέσοι
φορβάδος ἐκ γαίας ἑλεῖν·
εἶρπε γὰρ ἄλλοτ' ἄλλᾳ τότ' ἂν εἰλυόμενος,
παῖς ἄτερ ὡς φίλας τιθήνας, ὅθεν εὐμάρει' ὑπάρχοι πόρου, ἀνίκ' ἐξανείη δακέθυμος ἄτα·

Ib., 676–705.

5. "Ἀτρεΐδη τε καὶ ἄλλοι ἀριστῆες Παναχαιῶν,
πολλοὶ γὰρ τεθνᾶσι καρηκομόωντες Ἀχαιοί,
τῶν νῦν αἷμα κελαινὸν ἐΰρροον ἀμφὶ Σκαμανδρον
ἐσκέδασ' ὀξὺς Ἄρης, ψυχαὶ δ' Ἀϊδόσδε κατῆλθον·
τῷ σε χρὴ πόλεμον μὲν ἅμ' ἠοῖ παῦσαι Ἀχαιῶν,
αὐτοὶ δ' ἀγρόμενοι κυκλήσομεν ἐνθάδε νεκρούς
βουσὶ καὶ ἡμιόνοισιν· ἀτὰρ κατακήομεν αὐτοὺς
τυτθὸν ἀποπρὸ νεῶν, ὥς κ' ὀστέα παισὶν ἕκαστος
οἴκαδ' ἄγῃ, ὅτ' ἂν αὖτε νεώμεθα πατρίδα γαῖαν.
τύμβον δ' ἀμφὶ πυρὴν ἕνα χεύομεν ἐξαγαγόντες
ἄκριτον ἐκ πεδίου· ποτὶ δ' αὐτὸν δείμομεν ὦκα
πύργους ὑψηλοὺς, εἶλαρ νηῶν τε καὶ αὐτῶν,
ἐν δ' αὐτοῖσι πύλας ποιήσομεν εὐ ἁραρυίας,
ὄφρα δι' αὐτάων ἱππηλασίη ὁδὸς εἴη·
ἔκτοσθεν δὲ βαθεῖαν ὀρύξομεν ἐγγύθι τάφρον,
ἣ χ' ἵππους καὶ λαὸν ἐρυκάκοι ἀμφὶς ἰοῦσα,
μή ποτ' ἐπιβρίσῃ πόλεμος Τρώων ἀγερώχων."
ὣς ἔφαθ', οἱ δ' ἄρα πάντες ἐπῴνησαν βασιλῆες.
Τρώων αὖτ' ἀγορὴ γένετ' Ἰλίου ἐν πόλει ἄκρῃ,
δεινὴ, τετρηχυῖα, παρὰ Πριάμοιο θύρῃσιν.
τοῖσιν δ' Ἀντήνωρ πεπνυμένος ἦρχ' ἀγορεύειν·
"Κέκλυτέ μευ, Τρῶες καὶ Δάρδανοι ἠδ' ἐπίκουροι,
ὄφρ' εἴπω τά με θυμὸς ἐνὶ στήθεσσι κελεύει.
δεῦτ' ἄγετ', Ἀργείην Ἑλένην καὶ κτήματ' ἄμ' αὐτῇ
δώομεν Ἀτρεΐδῃσιν ἄγειν· νῦν δ' ὅρκια πιστὰ
ψευσάμενοι μαχόμεσθα· τῷ οὔ νύ τι κέρδιον ἡμῖν
ἔλπομαι ἐκτελέεσθαι ἵνα μὴ ῥέξομεν ὧδε."

HOMER—*Iliad*, vii., 327–353.

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Appendix, No. 2.

Sessional Examinations.

Second and Third Years.

Greek.—*Examiner, Professor D'Arcy Thompson,* M.A.

Translate into Greek the following passage:—

The general aspect of the city was perhaps more hideous and frightful than that of modern cities afflicted by a like calamity. Thucydides does not mention any precautions taken by public authority to prevent the spreading of the infection. And though such precautions are always partially eluded, their entire absence must have cost many lives, as well as have filled the city with horrible spectacles. Not only the streets and public places, but the sanctuaries which had been occupied for shelter, were strewed with corpses; which when, as frequently happened, no friendly hand could be found to burn them, seem to have been suffered to lie. And it was observed that neither dogs, nor carrion birds would touch them, and that the latter were not to be seen in the city so long as the pestilence lasted. Another consequence of this neglect was, that acts of violence were frequently committed by the relatives of the deceased, who had not the means of paying them the last offices of piety. The funeral pile which had been raised for one was pre-occupied by the friends of another; or a strange corpse would be thrown upon a pile already burning.

First Year—Pass.

Latin.—*Examiner, Professor Maguire,* LL.D.

Translate:—

(A.)—Ego omni officio ac potius pietate erga te ceteris satis facio omnibus, mihi ipse numquam satis facio. Tanta enim magnitudo est tuorum erga me meritorum, ut, quoniam tu nisi perfecta re de me non conquiesti, ego, quia non idem in tua causa efficio, vitam mihi esse acerbam putem. In causa haec sunt. Hammonius, regis legatus, aperte pecunia nos oppugnat. Res agitur per eosdem creditores, per quos, quum tu aderas, agebatur. Regis causa si qui sunt qui velint, qui pauci sunt, omnes rem ad Pompeium deferri volunt. Senatis religionis calumniam non religione, sed malovolentia et illius regiae largitionis invidia comprobat. Pompeium et hortari et orare, etiam liberius accusare et monere, ut magnam infamiam fugiat, non desistimus. Sed plane nec precibus nostris nec admonitionibus relinquit locum. Nam quum in sermone cotidiano tum in senatu palam sic egit causam tuam, ut neque eloquentia maiore quisquam nec gravitate nec studio nec contentione egere potuerit, cum summa testificatione tuorum in se officiorum et amoris erga te sui. Marcellinum tibi esse iratum scis. Is hac regia causa excepta ceteris in rebus se acerrimum tui defensorem fore ostendit.—Cicero—*Ad Familiares,* I., i., 1.

Give present, perfect, infinitive, and supine of every verb in this passage.

Parse every word in the last sentence.

(B.)—Insula naturâ triquetra, cuius unum latus est contra Galliam. Huius lateris alter angulus, qui est ad Cantium, quo fere omnes ex Gallia naves appelluntur, ad orientem solem, inferior ad meri-

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diem spectat. Hoc latus tenet circiter milia passuum quingenta. Alterum vergit ad Hispaniam atque occidentem solem, qua ex parte est Hibernia, dimidio minor, ut aestimatur, quam Britannia; sed pari spatio transmissus atque ex Gallia est in Britanniam. In hoc medio cursu est insula, quae appellatur Mona; complures praeterea minores obiectae insulae existimantur, de quibus insulis nonnulli scripserunt, dies continuos triginta sub bruma esse noctem. Nos nihil de eo percontationibus reperiebamus, nisi certis ex aqua mensuris breviores esse quam in continente noctes videbamus. Huius est longitudo lateris, ut fert illorum opinio, DCC milium. Tertium est contra septentriones, cui parti nulla est obiecta terra, sed eius angulus lateris maxime ad Germaniam spectat; huic milia passuum DCCC in longitudinem esse existimatur. Ita omnis insula est in circuitu vicies centum milium passuum. —CÆSAR—*De Bello Gall.*, v. 13.

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1. Put into the oblique :—

LIVY, xxi., 40.

Si eum exercitum, milites, educerem in aciem, quem in Gallia mecum habui, supersedissem loqui apud vos: quid enim adhortari referret aut eos equites, qui equitatum hostium ad Rhodanum flumen egregie vicissent, aut eas legiones, cum quibus fugientem hunc ipsum hostem secutus confessionem cedentis ac detractantis certamen pro victoria habui? Nunc, quia ille exercitus, Hispaniae provinciae scriptus, ibi cum fratre Cn. Scipione meis auspiciis rem gerit, ubi eum gerere senatus populusque Romanus voluit, ego, ut consulem ducem adversus Hannibalem ac Poenos haberetis, ipse me huic voluntario certamini obtuli, novo imperatori apud novos milites pauca verba facienda sunt. Ne genus belli neve hostem ignoretis, cum his est vobis, milites, pugnandum, quos terra marique priore bello vicistis; a quibus stipendium per viginti annos exegistis; a quibus capta belli praemia Siciliam ac Sardiniam habetis. Erit igitur in hoc certamine is vobis illisque animus, qui victoribus et victis esse solet. Nec nunc illi, quia audent, sed quia necesse est, pugnaturi sunt, nisi creditis, qui exercitu incolumi pugnam detractavere, eos duabus partibus peditum equitumque in transitu Alpium amissis, quia plures [paene] perierint quam supersint, plus spei nactos esse.

2. Give infinitives, perfects, and supines of *mando, pando, trudo, fundo, tundo, claudo, findo, texo, tego, perimo, como, coemo, scindo, cudo, caedo.*

3. Give the rules for the ablative singular and genitive plural of the third declension.

4. Explain the use of the moods in the following:—"Pugiles quum *feriunt* adversarium ingemiscunt, non quod *doleant* animove *succumbant* sed quia profundenda voce omne corpus *intenditur.*"

Prefix *dixit* and turn it into the past oblique.

FIRST YEAR—PREMIUM.

LATIN.—*Examiner, Professor Maguire,* LL.D.

Translate:—

(A.)—At Claudius matrimonii sui ignarus et munia censoria usurpans, theatralem populi lasciviam severis edictis increpuit, quod in P. Pomponium consularem (is carmina scenae dabat) inque feminas illustres probra iecerat. Et lege lata saevitiam creditorum coërcuit, ne in mortem parentum pecunias filiis familiarum fenori darent. Fontesque

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aquarum Simbruinis collibus deductos urbi intulit. Ac novas litterarum formas addidit vulgavitque, comperto Graecam quoque litteraturam non simul coeptam absolutamque.—TACITUS—*Annals*, xi. 13.

(B.)—*Simo.* Atqui hauscio an quae dixit sint vera omnia,
Sed parui pendo: illud mihi multo maximumust,
Quod mihi pollicitust ipsus gnatus, nunc Chremem
Conueniam: orabo gnato uxorem: id si impetro,
Quid alius malim quam hodie has fieri nuptias?
Nam gnatus quod pollicitust, haud dubiumst mihi,
Si nolit, quin eum merito possim cogere.
Atque adeo in ipso tempore eccum ipsum obuiam.

Simo.—Chremes.

Si. Iubeo Chremetem. *Ch.* O te ipsum quaerebam. *Si.* Et ego te. *Ch.* Optato aduenis.
Aliquot nae adierunt, ex te auditum qui aibant, hodie nubere
Meam filiam tuo gnato: id uiso tun an illi insaniant.

TERENCE—*Andria*, 525–535.

(C.)—Vivendum est illic, ubi nulla incendia, nulli
Nocte metus. Iam poscit aquam, iam frivola transfert
Vicinus, tabulata tibi iam tertia fumant:
Tu nescis; nam si gradibus trepidatur ab imis,
Ultimus ardebit, quem tegula sola tuetur
A pluvia, molles ubi reddunt ova columbae.
Lectus erat Codro Procula minor, urceoli sex,
Ornamentum abaci, nec non et parvulus infra
Cantharus et recubans sub eodem marmore Chiron;
Iamque vetus Graecos servabat cista libellos,
Et divina opici rodebant carmina mures.
Nil habuit Codrus; quis enim negat? et tamen illud
Perdidit infelix totum nihil: ultimus autem
Aerumnae cumulus, quod nudum et frustra rogantem
Nemo cibo, nemo hospitio tectoque iuvabit.

JUVENAL, iii., 197–211.

(D.)—Tua autem quae fuerit cupiditas tanta nescio, quod scribis cupisse te, quoniam Smyrnae duos Mysos insuisses in culeum, simile in superiore parte provinciae edere exemplum severitatis tuae et ideirco Zeuxim elicere omni ratione voluisse: quem adductum in iudicium fortasse dimitti non oportuerat, conquiri vero et elici blanditiis, ut tu scribis, ad iudicium necesse non fuit, cum praesertim hominem, quem ego et ex suis civibus et ex multis aliis cotidie magis cognosco nobiliorem esse prope quam civitatem suam. At enim Graecis solis indulgeo. —Quid? L. Caecilium nonne omni ratione placavi? quem hominem! qua ira! quo spiritu! Quem denique praeter Tusculanum, cuius causa sanari non potest, non mitigavi? Ecce supra caput homo levis ac sordidus, sed tamen equestri censu, Catienus: etiam is lenietur. Cuius tu in patrem quod fuisti asperior, non reprehendo: certo scio te reum fecisse cum causa. Sed quid opus fuit eius modi litteris, quas ad ipsum misisti? "illum crucem sibi ipsum constituere, ex qua tu eum ante detraxisses: te cruciaturum, famo ut combureretur, plaudente tota provincia." Quid vero ad C. Fabium nescio quem?—nam eam quoque epistolam T. Catienus circumgestat:—" renunciari tibi Licinium plagiarium cum suo pullo milvino tributa exigere." Deinde rogas Fabium, "ut et patrem et filium vivos comburat si possit: si minus, ad te mittat, uti indicio comburantur."—CICERO—*Ad Quintum*, I., ii., 2.

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SECOND YEAR.

LATIN.—*Examiner, Professor Maguire*, LL.D.

Translate :—

(A.) CICERO :

Idibus Ianuariis in senatu nihil est confectum, propterea quod dies magna ex parte consumptus est altercatione Lentuli consulis et Caninii tribuni pl. Eo die nos quoque multa verba fecimus maximeque visi sumus senatum commemoratione tuae voluntatis erga illum ordinem permovere. Itaque postridie placuit ut breviter sententias diceremus. Videbatur enim reconciliata nobis voluntas esse senatus: quod quum dicendo tum singulis appellandis rogandisque perspexeram. Itaque quum sententia prima Bibuli pronunciata esset, ut tres legati regem reducerent, secunda Hortensii, ut tu sine exercitu reduceres, tertia Volcatii, ut Pompeius reduceret, postulatum est ut Bibuli sententia divideretur. Quatenus de religione dicebat, cui rei iam obsisti non poterat, Bibulo adsensum est: de tribus legatis frequentes ierunt in alia omnia. Proxima erat Hortensii sententia, quum Lupus, tribunus pl., quod ipse de Pompeio rettulisset, intendere coepit ante se oportere discessionem facere quam consules. Eius orationi vehementer ab omnibus reclamatum est: erat enim et iniqua et nova. Consules neque concedebant neque valde repugnabant: diem consumi volebant: id quod est factum. Perspiciebant enim in Hortensii sententiam multis partibus plures ituros, quamquam aperte Volcatio adsentirentur. Multi rogabantur, atque id ipsum consulibus invitis: nam ei Bibuli sententiam valere cupierunt. Haec controversia usque ad noctem ducta senatus dimissus est. Ego eo die casu apud Pompeium cenavi nactusque tempus hoc magis idoneum quam umquam antea, quod post tuum discessum is dies honestissimus nobis fuerat in senatu, ita sum cum illo locutus, ut mihi viderer animum hominis ab omni alia cogitatione ad tuam dignitatem tuendam traducere. Quem ego ipsum quum audio, prorsus eum libero omni suspicione cupiditatis: quum autem eius familiares omnium ordinum video, perspicio, id quod iam omnibus est apertum, totam rem istam iam pridem a certis hominibus non invito rege ipso consiliariisque eius esse corruptam. Haec scripsi a. d. XVI. Kal. Febr. ante lucem. Eo die senatus erat futurus.

(B.) TACITUS :

Non vidit Agricola obsessam curiam et clausum armis senatum et eadem strage tot consularium caedes, tot nobilissimarum feminarum exilia et fugas. Una adhuc victoria Carus Metius censebatur, et intra Albanam arcem sententia Messalini strepebat, et Massa Baebius [iam] tum reus erat. Mox nostrae duxere Helvidium in carcerem manus; nos Maurici Rusticique visus, nos innocenti sanguine Senecio perfudit. Nero tamen subtraxit oculos suos, iussitque scelera, non spectavit: praecipua sub Domitiano miseriarum pars erat videre et aspici, cum suspiria nostra subscriberentur, cum denotandis tot hominum palloribus sufficeret saevus ille vultus et rubor, quo se contra pudorem muniebat.

Agricola, 45.

Ceteris servis non in nostrum morem, descriptis per familiam ministeriis, utuntur: suam quisque sedem, suos penates regit. Frumenti modum dominus aut pecoris aut vestis ut colono iniungit, et servus hactenus paret. Cetera domus officia uxor ac liberi exsequuntur.

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Sessional Examinations.

Verberare servum ac vinculis et opere coërcere rarum. Occidere solent, non disciplina et severitate, sed impetu et ira, ut inimicum, nisi quod impune est. Liberti non multum supra servos sunt, raro aliquod momentum in domo, numquam in civitate, exceptis duntaxat iis gentibus quae regnantur. Ibi enim et super ingenuos et super nobiles ascendunt: apud ceteros impares libertini libertatis argumentum sunt.

Germania, 25.

(C.) VIRGIL:

Collibus an plano melius sit ponere vitem,
Quaere prius. Si pinguis agros metabere campi,
Densa sere: in denso non segnior ubere Bacchus;
Sin tumulis aclivo solum collesque supinos,
Indulge ordinibus; nec secius omnis, in unguem
Arboribus positis, secto via limite quadret.
Ut saepe ingenti bello quum longa cohortes
Explicuit legio, et campo stetit agmen aperto,
Directaeque acies, ac late fluctuat omnis
Aere renidenti tellus, necdum horrida miscent
Proelia, sed dubius mediis Mars errat in armis:
Omnia sint paribus numeris dimensa viarum,
Non animum modo uti pascat prospectus inanem,
Sed quia non aliter vires dabit omnibus aequas
Terra, neque in vacuum poterunt se extendere rami.

Georgics, ii., 273–287.

Nec minus interea barbas incanaque menta
Cinyphii tondent hirci setosque comantes,
Usum in castrorum et miseris velamina nautis.
Pascuntur vero silvas et summa Lycaei,
Horrentesque rubos et amantes ardua dumos;
Atque ipsae memores redeunt in tecta, suosque
Ducunt, et gravido superant vix ubere limen.
Ergo omni studio glaciem ventosque nivales,
Quo minor est illis curae mortalis egestas,
Avertes, victumque feres et virgea laetus
Pabula, nec tota claudes focilia bruma.
At vero Zephyris quum laeta vocantibus aestas
In saltus utrumque gregem atque in pascua mittet;
Luciferi primo cum sidere frigida rura
Carpamus, dum mane novum, dum gramina canent,
Et ros in tenera pecori gratissimus herba.

Georgics, iii., 311–326.

(D.) HORACE:

Hinc prius angustis eiecta cadavera cellis
Conservus vili portanda locabat in arca;
Hoc miserae plebi stabat commune sepulcrum,
Pantolabo scurrae Nomentanoque nepoti.
Mille pedes in fronte, trecentos cippus in agrum
Hic dabat, heredes monumentum ne sequeretur.
Nunc licet Esquiliis habitare salubribus atque
Aggere in aprico spatiari, quo modo tristes
Albis informem spectabant ossibus agrum,
Cum mihi non tantum furesque feraeque, suëtae
Hunc vexare locum, curae sunt atque labori,
Quantum carminibus quae versant atque venenis

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Humanos animos. Has nullo perdere possum
Nec prohibere modo, simul ac vaga luna decorum
Protulit os, quin ossa legant herbasque nocentes.
Vidi egomet nigra succinctam vadere palla
Canidiam pedibus nudis passoque capillo.
Cum Sagana maiore ululantem: pallor utrasque
Fecerat horrendas adspectu. Scalpere terram
Unguibus et pullam divellere mordicus agnam
Coeperunt; cruor in fossam confusus, ut inde
Manes elicerent, animas responsa daturas.
Lanea et effigies erat, altera cerea: maior
Lanea, quae poenis compesceret inferiorem.

Satires, I., viii., 8–31.

Mention any words peculiar to *The Satires* and *The Georgics*; quote any instance from the latter of a shortened final diphthong; quote from Tacitus, *Agricola* and *Germania*, any *datives of the agent* you may remember; mention some of Horace's syncopated verbs.

First Year—Pass.

French.—*Examiner, Professor Geisler*, ph.d.

1. Translate into French :—

I prefer the beauty of the soul to that of the body. Agriculture and commerce are equally useful to man; the former nourishes us, the latter enriches us. Which of my copy-books will you have? The man, of whom you are speaking, is dead. The window upon which you lean is broken. Whoever knows that man, has little confidence in him. Nobody knows that woman. The enemies have surrendered. Get up! I shall get up directly. He got up at six o'clock. You are mistaken, sir. Yes, it is true, I have been mistaken. We were obliged to set out. I want a good pen. If you fulfil faithfully your duties, you will be esteemed by everybody. You have stayed longer than your brother. How far did you go yesterday? I shall get up earlier than you. The bread is well baked. Tell him that I am here. I lead him to the physician. Soldiers, follow me! You conquer all the difficulties. We fear the rain. Put out the candle and go to bed. Charles wrote his translation last night. We drink fresh water. It was quite dark and it was impossible for me to recognise my friend. My mother was born in England. How many years have you lived in America? What are you doing there? Do not make any noise, for my mother is asleep. Your friend is dying. Henry came to see me every morning. I should come earlier if I had time. You ought to come at two o'clock. Before he left, he provided for all. These pens are worth nothing. Sit down there a minute. I have found the ring which my cousin has lost and I shall send it to her. Why are they going away so soon? I should have already gone, if it had not rained so fast.

2. Write down the first person plural of the present and future tenses of :—faire, mourir, sentir, périr, lire, construire, éclaircir, fuir, craindre, plaindre, éteindre, savoir, vouloir, voir, envoyer, courir.

3. Translate into English :—

Cléonte. Peut-on rien voir d'égal, Covielle, à cette perfidie de l'ingrate Lucile?

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Covielle. Et à celle, monsieur, de la pendarde de Nicolo?

Cléonte. Après tant de sacrifices ardents, de soupirs et de voeux que j'ai faits à ses charmes!

Covielle. Après tant d'assidus hommages, de soins et de services que je lui ai rendus dans sa cuisine!

Cléonte. Tant de larmes que j'ai versées à ses genoux!

Covielle. Tant de seaux d'eau que j'ai tirés au puits pour elle!

Cléonte. Tant d'ardeur que j'ai fait paraître à la chérir plus que moi-même.

Covielle. Tant de chaleur que j'ai soufferte à tourner la broche à sa place!

Cléonte. Elle me fuit avec mépris!

Covielle. Elle me tourne le dos avec effronterie.

Cléonte. C'est une perfidie digne des plus grands châtiments.

Covielle. C'est une trahison à mériter mille soufflets.

Cléonte. Ne t'avise point, je te prie, de me parler jamais pour elle.

Covielle. Moi, monsieur? Dieu m'en garde!

Cléonte. Ne viens point m'excuser l'action de cette infidèle.

Covielle. N'ayez pas peur.

Cléonte. Non, vois-tu tous tes discours pour la défendre ne serviront de rien.

Covielle. Qui songe à cela?

Cléonte. Je veux contre elle conserver mon ressentiment et rompre ensemble tout commerce.

Covielle. J'y consens.

Cléonte. Ce, monsieur le comte qui va chez elle lui donne peut-être dans la vue, et son esprit, je le vois bien, se laisse éblouir à la qualité. Mais il me faut, pour mon honneur, prévenir l'éclat de son inconstance. Je veux faire autant de pas qu'elle au changement où je la vois courir, et ne lui laisser pas toute la gloire de me quitter.

Covielle. C'est fort bien dit; et j'entre, pour mon compte, dans tous vos sentiments.

Cléonte. Donne la main à mon dépit et soutiens ma résolution contre tous les restes d'amour qui me pourraient parler pour elle. Dis m'en, je t'en conjure, tout le mal que tu pourras. Fais-moi de sa personne une peinture qui me la rende méprisable, et marque-moi bien, pour m'en dégoûter, tous les défauts que tu peux voir en elle.

MOLIERE—*Le Bourgeois Gentilhomme.*

FIRST YEAR—HONORS.

FRENCH.—*Examiner, Professor Geisler,* PH.D.

I. Translate into English:—

I.

Mérope (se jetant à ses genoux):

Commencez donc par m'arracher la vie;
Ayez pitié des pleurs dont mes yeux sont noyés
Que vous faut-il de plus? Mérope est à vos pieds;
Mérope les embrasse, et craint votre colère.
A cet effort affreux jugez si je suis mère.
Jugez de mes tourments: ma détestable erreur,
Ce matin, de mon fils allait percer le coeur.
Je pleure à vos genoux mon crime involontaire.
Cruel, vous qui vouliez lui tenir lieu de père,

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Qui deviez protéger ses jours infortunés,
Le voilà devant vous et vous l'assassinez!
Son père est mort, helas! par une crime funeste;
Sauvez le fils; je puis oublier tout le reste;
Sauvez le sang des dieux et de vos souverains;
Il est seul, sans défense, il est entre vos mains.
Qu'il vive, et c'est assez. Heureuse en mes misères,
Lui seul il me rendra mon époux et ses frères.
Vous voyez avec moi ses aieux à genoux,
Votre roi dans les fers.

II.

Il sait que le venin de ces serpents est le plus subtil des poisons; qu'il allume soudain et dans toutes les veines, un feu qui dévore et consume, au milieu des douleurs les plus intolérables, le malheureux qui en est atteint. Il les entend, il croit les voir rampant autour de lui, ou pendus sur sa tête, ou roulés sur eux-mêmes et prêts à s'élancer sur lui. Son courage épuisé succombe; son sang se glace de frayeur; à peine il ose respirer. Transi, frissonnant, immobile, environné de mille morts, il passe la plus longue nuit dans une pénible agonie, désirant, frémissant de revoir la lumière, se reprochant la crainte qui le tient enchaîné, et faisant sur lui-meme d'inutiles efforts pour surmonter cette faiblesse.

MARMONTEL—LES INCAS.

(From Havet's "French Studies.")

III.

Il aime à taquiner le monde. Les assiéges furent réduits à la dernière extrémité. Il ne nous convient pas. Tu me payeras argent comptant. Nous nous sommes dérobés à la poursuite de nos ennemis. Prévenez-moi. Il a l'air malade. Il n'y entend pas malice. Il vit au jour le jour. Je prends fait et cause pour vous. Je vais lui dire son fait. Il y va de la vie. Il s'en donne à coeur-joie. Le plus fort en est fait. C'est un élève bien fort sur l'histoire. Prenez-en votre parti. Revenons à nos moutons. C'est un esprit d'une haute portée. C'est un mot jeté à propos. Je n'y vois goutte. Je me suis fait mal. Je ne saurais jamais m'y faire. Vous allez faire un mauvais coup. Il tient à son opinion. Je n'y tiens plus. Bien loin de se prêter à ses mauvaises plaisanteries, il prit un air serieux. Il le sait de bonne part. Il y est de première force.

II. Translate into French :—

1. There is nobody who does not know it. That is the least that you can do. If I had known that you were at home, I would have called on you. It is a pity that you did not come sooner. I should wish you to renounce this enterprise. I did not think that this was forbidden. I fear some misfortune has happened to him. I require that everyone shall do his duty. It is impossible that you succeed in your undertaking. I wish and hope that the peace may be a lasting one. Let us act in such a way that nobody may reproach us with anything.

2. The Normans established internal order such as had long been unknown in the Frank empire. They embraced Christianity, and with Christianity they learned a great part of what the clergy had to teach.

3. The Irish, on the other hand, were distinguished by qualities which tend to make men interesting rather than prosperous. They were an ardent and impetuous race, easily moved to tears or to laughter, to fury or to love. Alone among the nations of northern Europe they had the susceptibility, the vivacity, the natural turn for acting and rhetoric which are indigenous on the shores of the Mediterranean Sea.

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Appendix, No. 2.

Sessional Examinations.

Second Year.

French.—*Examiner, Professor Geisler,* ph.d.

Translate into French :—

1. After the hearing of the witnesses the magistrate did not hesitate to issue a warrant. I shall leave it to you to make all the arrangements for the journey. He met with a severe disappointment. She is not an accomplished woman, but she is a capital manager. She writes that she is now open to an engagement. He was reproached with being too particular in his dress. Your brother is liked by his schoolfellows, because he humours their jests. Why does he lay the blame on me? No one expected that she would make her appearance in society again. My brother is perfect master of several modern languages.

2. Sir, it is the misfortune of your life, and originally the cause of every reproach and distress which has attended your government, that you should never have been acquainted with the language of truth till you heard it in the complaints of your people. It is not, however, too late to correct the error of your education. We are still inclined to make an indulgent allowance for the pernicious lessons you received in your youth, and to form the most sanguine hopes from the natural benevolence of your disposition. We are far from thinking you capable of a direct deliberate purpose to invade those original rights of your subjects on which all their civil and political liberties depend. Had it been possible for us to entertain a suspicion so dishonourable to your character, we should long since have adopted a style of remonstrance very distant from humility of complaint. The people of England are loyal to the throne of Hanover, not from a vain preference of one family to another, but from a conviction that the establishment of their family was necessary to the support of their civil and religious liberties. The prince who imitates the conduct of the Stuarts, should be warned by their example; and while he plumes himself upon the security of his title to the crown, should remember that as it was acquired by one revolution, it may be lost by another.

3. Distinguish between: plaisant—pleasant; traiteur—traitor; courtier—courtier; dresser—to dress; desservir—to deserve; chérir—to cherish; attendre—to attend; troubler—to trouble; audience—audience; sensible—sensible; aviser—to advise; actuel—actual; rester—to rest.

4. Render in French: the main body of the army; a rough sea; a loud laugh; the prime of life; he is short-sighted. Hat off! the birthright; a waiting-room; poultry-yard; letter-box; ground-floor; folding-door; tramway; lawyers.

5. Render in English: il dort la grasse matinée. Il a le coeur gros. De plus belle il recommença. Il est mort de sa belle mort. Je l'ai connu de longue main. A la longue vous vous y ferez. Je la lui ai gardé bonne. Il y va de ma santé. Il s'acharne à m'en vouloir. Il finira par se dégourdir. Ils se sont liés d'amitié. Il faut faire entrer cela en ligne de compte. Je suis à même de vous le dire. Ils ont porté atteinte à son honneur. On a versé le montant. Le coup porta.

6. Form sentences in which the following expressions occur: s'en remettre, s'en rapporter à quelqu'un; s'en tenir à; en être réduit à, en venir aux mains; s'en falloir beaucoup; faire cas, tirer parti; ajouter foi; donner essor; prêter serment; tenir lieu; savoir gré.

7. Explain the following adverbial locutions: de parti pris, d'emblée, de mon mieux, de mon vivant, tout d'une haleine, de propos délibéré, sur ces entrefaites, au bout du compte, à toute épreuve, à vol d'oiseau; à corps perdu; à coup sûr; à tort et à travers; au fur et à mesure, à bride abattue; à plusieurs reprises; à la dérobée.

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7. Translate into English :—

I.

Chimène. Sire, de trop d'honneur ma misère est suivie.
Je vous l'ai déjà dit je l'ai trouvé sans vie ;
Son flanc était ouvert ; et pour mieux m'émouvoir,
Son sang sur la poussière écrivait mon devoir ;
On plutôt sa valeur, en cet état réduite
Me parlait par sa plaie et hâtait ma poursuite ;
Et pour se faire entendre au plus juste des rois,
Par cette triste bouche elle empruntait ma voix.
Sire, ne souffrez pas que sous votre puissance
Règne devant vos yeux une telle licence ;
Que les plus valeureux, avec impunité,
Soient exposés aux coups de la témérité ;
Qu'un jeune audacieux triomphe de leur gloire,
Se baigne dans leur sang et brave leur mémoire.
Un si vaillant guerrier qu'on vient de vous ravir,
Eteint, s'il n'est vengé, l'ardeur de vous servir.

Chimène. Puisque, pour t'empêcher de courir au trépas,
Ta vie et ton honneur sont de faibles appas,
Si jamais je t'aimai, cher Rodrigue, en revanche,
Défends toi maintenant pour m'ôter à don Sanche ;
Combats pour m'affranchir d'une condition
Qui me donne à l'objet de mon aversion.
Te dirai-je encore plus ? va, songe à ta défense,
Pour forcer mon devoir, pour m'imposer silence ;
Et si tu sens pour moi ton coeur encore épris,
Sors vainqueur d'un combat dont Chimène est le prix,
Adieu : ce mot lâché me fait rougir de honte.

CORNEILLE—*Cid.*

II.

2. *Maître Jacques.* Monsieur, puisque vous le voulez, je vous dirai franchement qu'on se moque partout de vous, qu'on nous jette de tous côtés cent brocards à votre sujet et que l'on n'est point plus ravi que de vous tenir au cul et aux chausses, et de faire sans cesse des contes de votre lésine. L'un dit que vous faites imprimer des almanachs particuliers, où vous faites doubler les quatre temps et les vigiles, afin de profiter des jeûnes, où vous obligez votre monde ; l'autre que vous avez toujours une querelle toute prête à faire à vos valets dans le temps des étrennes ou de leur sortie d'avec vous, pour vous trouver une raison de ne leur donner rien. Celui-là conte qu'une fois vous fites assigner le chat d'un de vos voisins pour vous avoir mangé un reste de gigot de mouton ; celui-là, que l'on vous surprit, une nuit, en venant dérober vous-même l'avoine de vos chevaux ; et que votre cocher qui était celui d'avant moi, vous donna dans l'obscurité je ne sais combien de coups de bâton dont vous ne voulûtes rien dire. Enfin voulez-vous que je vous dise ? on ne saurait aller nulle part où l'on ne vous entende accommoder de toutes pièces. Vous êtes la fable et la risée de tout le monde ; et jamais on ne parle de vous que sous les noms d'avare, de ladre, de vilain et de fesse-mathieu.—MOLIERE—*L'Avare.*

III.

George. Mon Dieu ! j'étalerais ma honte effrontément ;
Et je dirais : Messieurs, j'ai fait comme vous autres ;
Honorables faquins, place ! je suis des vôtres.

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Appendix, No. 2.

Sessional Examinations.

—Vous, monsieur, vous n'avez ni principe ni foi,
Et votre avancement est votre seule loi ;
Touchez là. Vous, monsieur, à la fin de la lutte,
Vous flattez la victoire et flétrissez la chute ;
Soyons amis ! Salut, o pieux débauché,
Que le mot effarouche, et non pas le péché !
Salut, o Turcaret ! salut, o parasite,
Qui souris des bons mots que Turcaret débite !
Banqueroutiers, valets, libertins,
Fripons de toute espèce et de tous les états,
Salut ! Nous nous devons un respect réciproque ;
Nous comprenons l'esprit positif de l'époque,
Nous sommes des pieds-plats, oui ; des maraudes—d'accord ;
Mais le monde est à nous, car nous avons de l'or.

Rodolphe. Je ne prends ces propos que pour une boutade ;
C'est un signe pourtant que l'esprit est malade :
Et si tu ne prends garde à ces velléités,
Tu descends le penchant qui mène aux lâchetés.

PONSARD—*L'Honneur et l'Argent.*

FIRST YEAR—PASS.

GERMAN.—*Examiner, Professor Geisler*, PH.D.

Translate into English :—

I.

Max. Du wirst mit mir verfahren, wie du Macht hast.
Wohl aber weisst Du, dass ich Deinem zorn
Nicht trotze, noch ihn fürchte. Was mich hier
Zurückhält, weisst Du !

(Thekla bei der Hand fasend).

Sieh ! Alles—Alles wollt 'ich Dir verdanken,
Das Loos der Seligen wollt 'ich empfangen
Aus Deiner väterlichen Hand. Du hast's
Zerstört ; doch daran liegt Dir nichts. Gleichgültig
Trittst Du das Glück der Deinen in den Staub,
Der Gott, dem *Du* dienst, ist kein Gott der Gnade.
Wie das gemüthlos blinde Element,
Das furchtbare, mit dem kein Bund zu schliessen,
Folgest Du des Herzens wildem Trieb allein.
Weh denen, die auf dich vertraun, an dich
Die sichre Hütte ihres Glückes lehnen,
Gelockt von Deiner gastlichen Gestalt !
Schnell, unverhofft, bei nächtlich stiller Weile,
Gährt's in dem tück'schen Feuerschlund, ladet
Sich aus mit tobender Gewalt, und weg
Treibt über alle Pflanzungen der Menschen
Der wilde Strom in grausender Zerstörung.

Wallenstein. Schnell fertig ist die Jugend mit dem Wort,
Das schwer sich handhabt wie des Messers Schneide ;
Aus ihrem heissen Kopfe nimmt sie keck
Der Dinge Mass die nur sich selber richten.

Gleich heisst ihr alles schändlich oder würdig,
Bös oder gut—und was die Einbildung
Phantastisch schleppt in diesen dunkeln Namen,
Das bindet sie den Sachen auf und Wesen.
Eng ist die Welt, und das Gehirn ist weit,
Leicht bei einander wohnen die Gedanken,
Doch hart im Raume stossen sich die Sachen,
Wo Eines Platz nimmt, muss das Andre rücken,
Wer, nicht vertrieben sein will, muss vertreiben;
Da herrscht der Streit und nur die Stärke siegt.

SCHILLER—*Wallenstein's Tod.*

II.

Heil'ge Ordnung, segenreiche
Himmelstochter, die das Gleiche
Frei und leicht und freudig bindet,
Die der Städte Bau gegründet,
Die herein von den Gefilden
Rief den ungesell'gen Wilden
Eintrat in der Menschen Hütten,
Sie gewöhnt zu sanften Sitten,
Und das theuerste der Bande
Wob, den Trieb zum Vaterlande!

III.

Auch mir ist alles wohl gerathen,
Bei allen meinen Herrscherthaten
Begleitet mich des Himmels Huld;
Doch hatt 'ich einen theuren Erben,
Den nahm mir Gott, ich sah ihn sterben,
Dem glück bezahlt 'ich meine Schuld.

II. Give the chief tenses of the irregular verbs you find in the above extracts.

FIRST YEAR—HONORS.

GERMAN.—*Examiner, Professor Geisler,* PH.D.

I. Translate into English:—

I.

Noch stand er und athmete tief nach der Angst und Anstrengung, da vernahm er grossen Lärm, der von dem Hunde herzurühren schien, doch kein Bellen oder Winseln. Das Räthsel beklemmte ihn immer unheimlicher; er bog den Kopf weit zu der Oeffnung hinaus, konnte aber nichts sehen als die regungslose Nacht im Gebirge. Auf einmal erscholl ein kurzes scharfes Heulen, darauf ein tief erschütterndes Stöhnen des Hundes und dann so lange und ängstlich er hinhorchte, kein Laut mehr die-gange Nacht.

Jeder Stein, jede schlüpfrige Stelle, jeder vor ihm hängende starre Tannenzweig war ihm ein Widerstand den er mit unverhältnissmässigem Aufbieten des Willens gervaltsam besiegte.

Als die Sonne des andern Tages aufging, sah sie das Paar auf dem Wege nach Genua, wohin Filippo vor den Nachstellungen seiner Feinde sich zurückzuziehen beschlossen hatte.

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Appendix, No. 2.

Sessional Examinations.

Der Wahnsinn der Freude verloderte bald, und da ich durch das Fenster die Jagd der Wolken sah und die Kälte empfand, die durch den Kamin stossweise hereinfuhr, wurde ich plötzlich von Schrecken und Schauder erfüllt und sah mein Kleinod, mein Weib, mein Leben auf der furchtbaren See verloren dahinschwanken. Nein, rief ich aus, das kannst du nicht wollen, gütiger Gott, der den Stürmen und Wellen gebietet, dass das Ungeheure geschehe! Zerbrich meine Schiffe, versenke die Ladung, mache mich zum Bettler, aber rette mir mein Weib!

PAUL HEYSE'S *Novellen.*

II.

Von Tellheim. So dacht ich, so sprach ich, als ich nicht wusste was ich dachte und sprach. Aergerniss und verbissene Wuth hatten meine ganze Seele umnebelt; die Liebe selbst, in dem vollsten Glanze des Glückes, konnte sich darin nicht Tag schaffen. Aber sie sendet ihre Tochter, das Mitleid, die, mit dem finstern Schmerz vertrauter, die Nebel zerstreut und alle Zugänge meiner Seele den Eindrücken der Zärtlichkeit wiederum oeffnet. Der Trieb der Selbsterhaltung erwacht, da ich etwas Kostbareres zu erhalten habe, als mich, und es durch mich zu erhalten habe. Lassen Sie sich, mein Fräulein, das Wort Mitleid nicht beleidigen. Von der unschuldigen Ursache unseres Unglücks können wir es ohne Erniedrigung hören. Ich bin diese Ursache; durch mich, Minna, verlieren Sie Freunde und Anverwandte, Vermögen und Vaterland. Durch mich, in mir müssen Sie alles dieses wiederfinden, oder ich habe das Verderben der Liebenswürdigsten Ihres Geschlechts auf meiner Seele. Lassen Sie mich keine Zukunft denken, wo ich mich selbst hassen müsste. Nein nichts soll mich hier länger halten. Von diesem Augenblicke an will ich dem Unrechte, das mir hier widerfährt, nichts als Verachtung entgegensetzen. Ist dieses Land die Welt? Geht hier allein die Sonne auf? Wo darf ich nicht hinkommen? Welche Dienste wird man mir verweigern? Und müsste ich sie unter dem entferntesten Himmel suchen: folgen Sie mir nur getrost, liebste Minna: es soll uns an nichts fehlen. Ich habe einen Freund, der mich unterstützt.

LESSING—*Minna von Barnhelm.*

III.

Prinzessin:

Nicht das! Allein ihr strebt nach fernen Gütern,
Und euer Streben muss gewaltsam sein.
Ihr wagt es für die Ewigkeit zu handeln,
Wenn wir ein einzig nah beschränktes Gut
Auf dieser Erde nur besitzen möchten,
Und wünschen dass es uns beständig bleibe.
Wir sind vor keinem Männerherzen sicher,
Das noch so warm sich einmal uns ergab.
Die Schönheit ist vergänglich, die ihr doch
Allein zu ehren scheint. Was übrig bleibt
Das reizt nicht mehr, und was nicht reizt, ist todt.
Wenn's Männer gäbe, die ein weiblich Herz
Zu schätzen wüssten, die erkennen möchten,
Welch einen holden Schatz von Treu' und Liebe
Der Busen einer Frau bewahren kann;
Wenn das Gedächtniss einzig schöner Stunden
In Euren Seelen lebhaft bleiben wollte;
Wenn Euer Blick, der sonst durchdringend ist,
Auch durch den Schleier dringen könnte, den
Uns Alter oder Krankheit überwirft;

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Wenn der Besitz der ruhig machen soll,
Nach fremden Gütern Euch nicht lüstern machte:
Dann wär uns wohl ein schöner Tag erschienen,
Wir feierten dann unsre goldne Zeit.

GOETHE—*Tasso.*

II. "So fühlt man Absicht und man ist verstimmt."

Comment on this passage as fully as you can.

III. Translate into German :—

Catherine had been hitherto poor, but still was free; she was now to conform to her hard fate and learn what it was to be a slave; in this situation, however, she behaved with piety and humility; and though misfortunes had abated her vivacity, yet she was cheerful. The fame of her merit and resignation reached even Prince Mantchikoff, the Russian general. He desired to see her, was struck with her beauty, bought her from the soldier her master, and placed her under the direction of his own sister. Here she was treated with all the respect which her merit deserved, while her beauty every day improved with her good fortune. She had not been long in this situation when Peter the Great paying the prince a visit, Catherine happened to come in with some dry fruits which she served round with peculiar modesty. The mighty monarch saw her and was struck with her beauty. He returned the next day, called for the beautiful slave, asked her several questions, and found her understanding even more perfect than her person.

OLIVER GOLDSMITH.

SECOND YEAR—PASS.

GERMAN.—*Examiner, Professor Geisler,* PH.D.

I. Translate into German :—

1. But the very circumstance, that the whole authority of Alcibiades was derived from his personal qualities, also constituted his weakness. For the safe guidance of others he lacked the moral dignity which alone is able to call forth real respect and lasting attachment. With all his brilliant advantages, Alcibiades was but a human being like the rest—a character full of inner contradictions, in which good and bad tendencies, unregulated by principle, kept up a continual conflict; and therefore, notwithstanding its acute intelligence, his mind failed to attain to clearness and distinctness of aim.

2. From the time of Solon, the history of Greece is in the main a history of Athens. From Athens proceed all the impulses which gave life and significance to the national history; while on the part of Sparta and the other States we meet with no independent pursuit of their own aims, with no endeavour to further national objects and see no forces at work but those of negation and contradiction, no motives operating but those of hatred and bitter jealousy.

II. Comment in German on the following passage of Goethe's Tasso :—

"Es bildet ein Talent sich in der Stille,
Sich ein character in dem Strom der Welt."

III. Give the meaning of: Verhandlungen pflegen; Erkundigungen einziehen; ein Verfahren einleiten; ein Amt antreten; Schaden anrichten; Schlacht liefern; Kosten bestreiten; Bericht erstatten; Nachsicht üben; Befugniss ausüben; Verdacht schöpfen; Angelegenheiten schlichten; Beifall zollen——to bid defiance; to take steps, measures; to oppose

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Appendix, No. 2.

Sessional Examinations.

resistance; to keep company; to commit a crime; to cherish the hope; to offer objections; to impart instruction; to wreak revenge; to pay a visit; to seize the occasion; to render a favour; to deliver a speech; to conceive an idea; to redress grievances.

IV. Translate into English:—

I.

Tasso. Was auch in meinem Liede wiederklingt,
Ich bin nur Einer, Einer alles schuldig!
Es schwebt kein geistig unbestimmtes Bild
Vor meiner Stirne, das der Seele bald
Sich überglänzend nahte, bald entzöge,
Mit meinen Augen hab' ich es gesehn,
Das Urbild jeder Tugend, jeder Schöne;
Was ich nach ihm gebildet, das wird bleiben:
Tancredens Heldenliebe zu Chlorinden,
Erminiens stille nicht bemerkte Treue,
Sophronions Grossheit und Olindens Noth,
Es sind nicht Schatten, die der Wahn erzeugte,
Ich weiss es, sie sind ewig, denn sie sind.
Und was hat mehr das Recht, Jahrhunderte
Zu bleiben und im Stillen fortzuwirken,
Als das Geheimniss einer edlen Liebe,
Dem holden Lied bescheiden anvertraut?

Tasso. O welches Wort sprichst meine Fürstin aus!
Die goldne zeit, wohin ist sie geflohen?
Nach der sich jedes Herz vergebens sehnt!
Da auf der freien Erde Menschen sich
Wie frohe Herden im Genuss verbreiteten;
Da ein uralter Baum auf bunter Wiese
Dem Hirten und der Hirtin Schatten gab,
Ein jüngeres Gebüsch die zarten zweige
Um sehnsuchtsvolle Liebe traulich schlang;
Wo klar und still auf immer reinem Sande
Der weiche Fluss die Nymphe sanft umfing;
Wo in dem Grase die gescheuchte Schlange,
Unschädlich sich verbarg, der kühne Faun
Vom tapfern Jüngling bald bestraft entfloh;
Wo jeder Vogel in der freien Luft,
Und jedes Thier, durch Berg und Thäler schweifend,
Zum Menschen sprach: Erlaubt ist was gefällt.

GOETHE—*Tasso.*

II.

Bedenke ich es aber jetzt genauer, so finde ich hier den Keim der Nichtachtung, ja der Verachtung des Publicum's die mir eine ganze Zeit meines Lebens, anhing und nur spät durch Einsicht und Bildung ins Gleiche gebracht werden konnte. Genug, schon damals war das Gewahrwerden partheiischer Ungerechtigkeit dem knaben sehr unangenehm, ja schädlich, in dem es ihn gewöhnte sich von geliebten und geschätzten Personen zu entfernen. Die immer aufeinander folgenden Kriegsthaten und Begebenheiten liessen den Parteien weder Ruhe noch Rast. Wir fanden ein verdriessliches Behagen, jene eingebildeten Uebel und willkührlichen Händel immer von frischem wieder zu erregen, und zu schärfen; und so fuhren wir fort uns untereinander zu quälen, bis einige Jahre darauf die Franzosen Frankfurt besetzten, und uns wahre Unbequemlichkeit in die Häuser brachten.

GOETHE—*Wahrheit und Dichtung.*

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ITALIAN—*Examiner, Professor Geisler,* PH.D.

1. Translate into Italian :—

Presents appease not only men, but also gods. A friend has sent me a basket of eggs. Mirth, by cheering us, makes us healthy and happy. Do not hurt my hand. A Spartan was reprimanded for having used three words on an occasion in which two would have sufficed. Let us do to others as we would have others do to us. You children may now go and play. He will go to spend the winter in Paris with his relations. My foot pains me. There is no worse enemy than a false friend. It was warmer to-day than yesterday. Greece was more polished than any other nation of antiquity. We were in Berlin a year ago. At what o'clock shall we breakfast? I will describe it to you as I have seen it. We should not believe those who flatter us. In writing to him, you can inform him of your plan. Let them tell me what they have done. I will give it to him willingly. I have sent them to him, and he must have received them by this. His friends spoke to him of it in confidence.

2. Give the definite tense, first person singular and third person plural of the following verbs : fare, dare, piangere, stare, sapere, conoscere, venire, scrivere, piacere, soffrire, scegliere, giungere, movere, nascere, cleggere, chiedere. Give the first person of the present and future tenses of : morire, uscire, andare, fare, volere, potere, dovere, porre, venire, tenere, bēre.

3. Enumerate the Italian adverbs you know.

4. Translate into English :—

Renzo abbracciò molto volentieri questo parere ; Lucia l'approvò ; e Agnese, superba d'averlo dato, levò, a una a una, le povere bestie dalla stia, rinnì le lore otto gambe, come se facesse un mazzetto di fiori, le avvolse et e le strinse con uno spago, e le conseguò in mano a Renzo ; il quale, date e ricevute parole di speranza, nsci dalla parte dell' orto, per non esser veduto da' ragozzi che gli correbber dietro, gridando : Lo sposo ! Lo sposo ! Così, attraversando i campi, o come dicon colà, i luoghi, se n'andò per viottole, fremendo, ripensando alla sua disgrazia, e ruminando il discorso da fare al dottor Azecca-garbugli : Lascio poi pensare al lettore, come dovessero stare in viaggio quelle povere bestie, così legate e tenute per le zampe, a capo all' in giù, nella mano d'un uomo il quale, agitato da tante passioni, accompagnava col gesto i pensieri che gli passavan a tumulto per la mente. Ora stendeva il braccio per collera, ora l' alzava per desperazione, ora lo dibatteva in aria, come per minaccia, e in tutti i modi, dava loro di fiere scosse, e faceva balzare quelle quattro teste spenzolate ; le quali intanto s' ingegnavano a beccarsi l' una con l' altra, come accade troppo sovente tra compagni di sventura.

ALESSANDRO MANZONI—*Promessi Sposi.*

FIRST YEAR—HONORS.

Examiner, George J. Allman, LL.D.

1. A, B, C, D are four points taken in order on a straight line. If circles be described having AC and BD as diameters, show that the anharmonic ratios of the four points can be expressed in terms of the angle at which the circles intersect.

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Appendix, No. 2.

Sessional Examinations.

2. Three objects, A, B, C, which are situated on a level horizontal plane, can be observed from a point P; find the distances of the point P from A, B, C.

3. Eliminate ϕ from the equations

$$y\cos\phi - x\sin\phi = a\cos 2\phi,$$
$$y\sin\phi + x\cos\phi = 2a\sin 2\phi.$$

4. Divide the surface of a sphere in a given ratio by a plane perpendicular to a given diameter; solve the same problem for the volume.

5. The arc of a great circle bisecting the sides AB, AC of a spherical triangle cuts BC produced at Q; prove that

$$\cos AQ \sin\frac{a}{2} = \sin\frac{c-b}{2}\sin\frac{c+b}{2}.$$

6. Investigate Gregory's series for the determination of π.

7. Show that the number of combinations of n objects taken r at a time is equal to the sum of the number of combinations of $n-1$ objects taken at r at a time and taken $r-1$ at a time.

Apply this theorem to find the sum of the first n triangular, pyramidal, and, generally, figurate numbers.

8. Show that the second and fourth terms of the equation

$$x^4 + p_1x^3 + p_2x^2 + p_3x + p_4 = 0$$

can be removed by the same transformation if $8p_3 = p_1(4p_2 - p_1^2)$.

9. If $S_1, S_2, S_3, \ldots$ are the sums of the first, second, third, ... powers of the roots of the equation $f(x)=0$ of the nth degree, show that

$$\frac{xf'(x)}{f(x)} = n + \frac{S_1}{x} + \frac{S_2}{x^2} + \frac{S_3}{x^3} + \text{ \&c., } \ldots.$$

10. At any point of the base of a triangle a line of given length is drawn parallel to a given one and so as to be cut in a given ratio by the base; find the locus of the intersection of the lines joining its extremities to those of the base.

11. Find the locus of a point O, if the line joining it to a fixed point makes the same intercept on the axis of x, as is made on the axis of y, by a perpendicular through O to the joining line.

12. From a fixed point A on the circumference of a given circle a chord is drawn cutting the circle in N and the tangent at the opposite extremity of the diameter AB in M, a distance AP is measured on AM so that AP=MN; find the locus of P in polar co-ordinates, and transform the equation into rectangular co-ordinates.

Second Year—Honors.

Examiner, George J. Allman, LL.D.

1. Describe through a given point a conic section with given foci; show that there are two solutions, and interpret the result.

2. Two vertices of a *given* triangle move along fixed straight lines; find the locus of the third.

3. Show that the equation of the asymptotes of a hyperbola differs from that of the curve in the constant term only. Apply this principle to find the equation of the asymptotes of the hyperbola given by the general equation.

4. The tangent at a point P on one curve intersects another curve at the points A, and B so that AB is of constant length; if a perpendicular

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be let fall from M, the intersection of the tangents at A and B; prove that AP=MB. *Appendix, No. 2.*

The portion of the tangent to an ellipse intercepted between the axes is a minimum; find its length. Sessional Examinations.

5. State and prove the theorem of Leibnitz for finding the nth differential co-efficient of the product of two functions of x. Apply this theorem to the function x^2e^{ax}.

6. Eliminate the circular functions from the equation $y=\sin(m\sin^{-1}x)$.

$\left\{(1-x^2)\frac{d^2y}{dx^2}-x\frac{dy}{dx}+m^2y=0\right\}$. Expand $\sin(m\sin^{-1}x)$ in powers of x.

7. Prove that the normal at any point P of the curve $F\{\rho_1, \rho_2 \ldots \rho_n\}=$ const., where $\rho_1, \rho_2 \ldots \rho_n$ are the distances from any point on the curve to n fixed points, is given by the following construction:—Measure on the distances from the point P to the n fixed points lengths proportional to $\frac{dF}{d\rho_1}, \frac{dF}{d\rho_2} \ldots \frac{dF}{d\rho_n}$ respectively; the direction of the normal is that of the *resultant* of these lines.

8. State and prove Euler's theorems concerning homogeneous functions for the first and second orders, in the particular case of two variables.

9. Prove the expression for the radius of curvature $\rho=r\frac{dr}{dp}$.

If $u=\frac{1}{r}$, prove that— $\rho=\frac{\left\{1+\left(\frac{du}{ud\theta}\right)^2\right\}^{\frac{3}{2}}}{u+\frac{d^2u}{d\theta^2}}$.

10. Show that—

$$\int e^{cx}\cos ax\,dx=\frac{e^{cx}\cos(ax-\phi)}{(a^2+c^2)^{\frac{1}{2}}}+c, \text{ where } \tan\phi=\frac{a}{c}.$$

11. If A denote the area contained between the catenary—

$$y=\frac{c}{2}\left(e^{\frac{x}{c}}+e^{-\frac{x}{c}}\right),$$

the axis of x, the axis of y, and an ordinate at the extremity of the arc s, show that $A=cs$. The arc is measured from the point $x=0$.

12. Find the following integrals:—

$\frac{d\theta}{a+b\cos\theta}$, and give the results, according as $a>b$ or $a<b$;

$\frac{dx}{(a+cx^2)\sqrt{a'+c'x^2}}$.

Third Year.

Mathematics.

1. Find the equation of a plane passing through three given points, and determine the geometrical signification of the constants which enter into the equation.

2. Find the condition that the plane $Ax+By+Cz+D=0$, shall touch the ellipsoid $\frac{x^2}{a^2}+\frac{y^2}{b^2}+\frac{z^2}{c^2}=1$.

3. Determine the equation of the cone whose vertex is at the point

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Appendix, No. 2.

Sessional Examinations.

x', y', z', and which stands upon the curve $z=0$, $\frac{x^2}{a^2}+\frac{y^2}{b^2}=1$.

4. Find the expression for the angle of torsion of a curve of double curvature $\frac{d\theta}{ds}=\frac{X d^3x+Y d^3y+Z d^3z}{X^2+Y^2+Z^2}$, where $X=dy d^2z-d^2d^2y$, &c.

5. Prove that the sum of the curvatures of any two normal sections at right angles to each other, at any point of a given surface, is constant.

6. Find the surface generated by a straight line which always meets three fixed straight lines.

7. Investigate the conditions under which the equation $Mdx+Ndy=0$ can be made integrable by a factor μ, which is a homogeneous function of x and y of the degree 0.

8. Show that the curve in which the radius of curvature varies as the cube of the normal is a conic section.

9. Integrate the differential equations:—

$$2x(1+x^2)\frac{dy}{dx}+2x^2y-1=0\ ;\ y=x\frac{dy}{dx}+\frac{dy}{dx}-\left(\frac{dy}{dx}\right)^2\ ;\ x^2\frac{d^2y}{dx^2}-x\frac{dy}{dx}=3y.$$

10. Integrate the partial differential equations:—

$$(x+y)\,p+(y-x)\,q=z\ ;\ x\,z\,p+y\,z\,q=x\,y.$$

Second Year's Arts.

Mixed Mathematics.—*Examiner, Professor Curtis*, LL.D.

1. Three forces act perpendicularly to the sides of a plane triangle at their middle points, and each is proportional to the side, on which it acts; show that they will equilibrate each other.

2. A weight of 5 lbs. is suspended freely from a fixed point by a perfectly flexible string; find what horizontal force applied to the string will draw its upper portion 30° out of the vertical.

3. Find the centre of gravity of a triangular plate.

4. A bar of iron, of uniform thickness, 10 feet long, and weighing $1\frac{1}{2}$ cwt., is supported at its extremities in a horizontal position, and carries a weight of 4 cwt. suspended from a point 3 feet from one extremity; find the pressures on the points of support.

5. A body is allowed to fall freely from rest, under the action of gravity—find (α) the velocity acquired in 5 seconds. (β) the space described in 5 seconds. (γ) the space described in the fifth second.

6. Find the time in which a heavy body, starting from rest, will slide down 32 feet of a plane, making an angle of 30° with the horizon.

7. A square, whose side is 2 feet, is sunk in water so that its centre of gravity is at the depth of 8 feet; find the total pressure to which it is exposed on each face.

8. A body weighs 2 oz. in air, and $1\frac{1}{2}$ oz. in water; find its specific gravity.

9. Show that the linear magnitudes of an object and its image, as seen in a spherical reflector, are (α) as their distances from the centre of the spherical surface; (β) as their distances from the surface itself.

10. An object is placed at the distance of 3 feet from a lens whose focal length is 5 feet; find the position of the image, and whether it is greater, or less, than the object—(α) when the lens is concave—(β) when the lens is convex.

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Second Year's Arts and Engineering.

Mixed Mathematics.—*Examiner, Professor Curtis,* LL.D.

1. If three parallel forces acting at the angular points of a triangle, ABC, are respectively proportional to the opposite sides, a, b, c, prove that the distance of the centre of parallel forces from $A = \frac{2\,b\,c}{a+b+c} \cos\frac{A}{2}$.

2. One extremity of a uniform beam of length $2a$ rests against a smooth vertical wall, and the other on the smooth interior of a hemisphere of radius r, and whose centre is at the distance c from the wall, the hemisphere being fixed with its circular section horizontal; if θ be the inclination of the beam to the horizon, and ϕ that of the radius drawn to the point where the beam presses against the sphere, prove that the position of equilibrium is given by the equations, $2 \tan\theta = \tan\phi$, $2a\cos\theta = r\cos\phi + c$.

3. Extend the last problem to the cases in which—(a) the beam is heterogeneous; (b) the beam, is heterogeneous, and the wall and sphere are rough.

4. A platform is supported by a Smeaton's pulley; show that a man of weight W, standing on the platform, may support himself by exerting on the string force equal to $\frac{n+1}{2n+1} W$, where n is the number of rollers in the pulley, and m W is the weight of the pulley and platform.

5. An ellipse is placed with its axis major vertical; prove that the axis major is the line of quickest, or slowest, descent to the curve from any point on it, and distinguish between the two cases.

6. Given, the initial position, and initial velocity, of a projectile, determine the envelope of all possible paths situated in a given vertical plane.

7. Prove that the sighting of a gun depends only on the distance of the object, and not on its elevation, when the charge is given. Find how it is affected by altering the charge.

8. Determine the centre of pressure of a parallelogram, one diagonal of which is horizontal, while the extremities of the other are at given depths in a homogeneous liquid.

9. Determine the centre of pressure of an elliptic area sunk in any way in a homogeneous liquid.

10. Determine the form of the image of a straight line formed by a concave, or convex, mirror, also by a thin lens.

11. A spherical bubble contains one gas, and is surrounded by another, light passes nearly perpendicularly through it; find the focus of the emergent pencil, that of the incident being given.

12. Find the principal focus of a sphere of water.

Third Year's Arts.—Honors.

Mixed Mathematics.—*Examiner, Professor Curtis,* LL.D.

1. A system of forces act upon a rigid body; prove that they are reducible in an infinite variety of ways—(a) to a force and a couple, (b) to two forces which, in general, neither intersect nor are parallel. What geometrical condition connects these two forces? Discuss the exceptional cases (α) when the two forces intersect, (β) when they are parallel.

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Appendix, No. 2.

Sessional Examinations.

2. A quadrilateral formed by four rigid rods jointed at their ends is placed on a smooth horizontal table; show that two of its sides must be parallel, in order that it may retain its form, when the middle points of either pair of opposite sides are joined together by a string in a state of tension.

3. A surface is formed by the revolution of an equilateral hyperbola round one of its asymptotes, which is vertical; show that a particle will rest on it supposing it rough, anywhere beyond the intersection of the surface with a certain circular cylinder.

4. A solid bounded by a curved surface rests on a horizontal plane; find the conditions that it should be—(*a*) in stable equilibrium, (*b*) in unstable equilibrium, (*c*) in *apparently* neutral equilibrium. When is this last state—(*a*) really stable? (*β*) really unstable?

5. Prove the following properties of the common catenary:—(*a*) Its radius of curvature is equal to the normal intercepted by a certain horizontal line. (*b*) It is the evolute of the tractrix defined by the equation

$$x = c \log \frac{(c + \sqrt{c^2 - y^2})}{y} - \sqrt{c^2 - y^2}.$$

(*c*) It is the roulette generated by the focus of a parabola, which rolls on a straight line.

6. Find the law of force, under which a particle will describe the central pedal of a conic, the force being directed towards the centre. How does the result become modified, if the conic be an equilateral hyperbola?

7. Find the orbit, in which the central force is defined by

$$(a)\ \mu r + \frac{\nu}{r^3},\ (b)\ \frac{\mu}{r^2} + \frac{\nu}{r^3}.$$

How is the result modified in each case, if $v = h^2$, h being double the area described in one second?

8. Determine the time of a small vibration of a triangular plate round the perpendicular let fall from vertex on base.

9. A rectangular parallelopiped floats in equilibrium, with two faces horizontal, in a homogeneous liquid; find the conditions which determine the character of the equilibrium.

10. A uniform paraboloid floats in equilibrium in a homogeneous liquid; find the conditions that the equilibrium should be—(*a*) stable, (*b*) unstable, (*c*) *apparently* neutral. Show that, in this last case, the equilibrium is *really* stable.

11. Determine, from optical considerations, the evolute of a cardioid.

12. Determine the caustic by refraction of a plane, the incident rays diverging from a point.

Third Year's Arts and Second Year's Engineering.

Experimental Physics.—*Examiner, Professor Curtis,* LL.D.

1. Describe the principal capillary phenomena known to you.

2. Describe experiments which prove that capillary phenomena are modified by temperature.

3. Why is Mariotte's law not applicable to gases when suddenly condensed by increase of pressure? Deduce the law applicable to this case.

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4. The note of a tuning fork being given, how would you determine the lengths of all the tubes open at both ends, which would resound to it? What relations exist between the note of the fork and the fundamental notes of the several tubes?

5. Explain fully what is meant by musical temperament.

6. Point out the difference between the laws of transversal and of longitudinal vibrations of strings.

7. In making observations on conductivity, what precaution must be observed, and why?

8. Point out the essential difference between evaporation and boiling, and explain why, although the temperature of boiling diminishes with pressure, it does not diminish beyond certain limits.

9. What must be regarded, on the undulatory theory of light, as the distinction between the propagation of light within an ordinary and an extraordinary medium—(α) with respect to velocity? (β) with respect to direction of vibration?

10. If, instead of a single thread, there be substituted, in Coulomb's balance, a bifilar arrangement; determine the law according to which the instrument will measure electrical charge.

11. Define lines of magnetic force due to the action of two magnetic poles; show that the magnetic curves are lines of force; determine their geometrical character, and that of the orthogonal system or curves of equilibrium.

12. From Ampère's law deduce the positions of stable and unstable equilibrium of a circular current free to revolve round a vertical diameter.

Junior Engineering Class.

Examiner, Professor Townsend, M.A.

1. Print neatly the following sentence:—"The gates of public road level crossings must have signals visible from the line, and distant signals if required."

2. (α) Through a given point draw a plane parallel to a given plane.

(β) Through a given point draw a plane perpendicular to a given line.

3. Given the projections of two lines, develop the angle between them.

4. (α) On a given line construct a pentagon.

(β) Given the axes of an ellipse, construct it, and draw a tangent to it from a point outside.

5. (α) The scale of a map is $2\frac{1}{2}$ chains to one inch, this is reduced to half its area; find scale of new map.

(β) Find a factor by means of which kilogrammes per square millimetre may be reduced to pounds per square inch.

6. From the accompanying drawings construct the perspective.

7. With the same data construct the isometric.

8. Through a given line draw a tangent plane to a sphere.

9. The projections of a line being given, draw through it a plane making a given angle with the horizontal plane of projection.

10. With a given circle construct a cycloid, and draw a tangent at any point.

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Appendix, No. 2.

Sessional Examinations.

Engineering Class—Second Year.

Examiner, Professor Townsend, M.A.

1. Prove the principle on which the planimeter is constructed.
2. Give the formula for the approximate length of an arc of a circle in terms of the chords of the entire and half arcs, and prove the expression. Also determine in the above formula the error for an arc equal to the radius.
3. Read the Verniers set before you.
4. Show how to arrange the adjustments of the level set before you.
5. Show how to effect the adjustments of the theodolite set before you.
6. (α) Bidder's tabular numbers corresponding to two given heights are—red, 31·8; black, 414; find Macneill's (second series), the ratio of slopes being $2\frac{1}{2}$ to 1.

(β) With same data find Macneill's tabular number (first series) the base being 30 feet.

7. The acreage of a field measured with a chain one-fifth of a link too short is 260A. 3R. 36P.; find true acreage.
8. The sides of a triangle are 850, 1,490 and 1,882 links; find the acreage both in English and Irish measure.
9. The radius of a curve, 583 yards; the angle between the tangents, 144° 26′; the chord or arc = 100 feet; find tangent, secant, length of curve, and tangential angle.
10. In laying out a railway curve, the intersection of the tangents being inaccessible, prove the equations which give three points on the curve besides the starting points, by means of a transversal.

Engineering Class—Third Year.

Examiner, Professor Townsend, M.A.

1. Describe the characteristics of the Norman style of architecture, and mention its principal ornaments.
2. Describe the Doric order, and mention some of the best Grecian examples.
3. Describe the composition and manufacture of Portland cement, and give a specification for its requirements. State also how a ready test of its efficieney ean be made.
4. Describe Bessemer's process of producing steel, and also the other kinds used in commerce. Mention also the chemical and mechanical differences between it and wrought-iron.
5. A rectangle, 5 feet by 4 feet, is immersed in water with the shorter side 10 feet from the surface; find the pressure on it, and the distance of the centre of pressure from the surface.
6. Calculate the number of gallons per minute flowing from a pipe 18 inches diameter, the fall being 10 feet per mile.
7. Find the thickness of a locomotive boiler for a working pressure of 100 lbs. per square inch, the factor of safety being 7, and the tenacity of the single rivetted material being 34,000 per square inch.
8. Investigate the strength and deflection of a beam uniformly loaded and firmly fixed at both ends.
9. Given the positions of the crank at the instants of admission and cut-off; find the angular advance of the eccentric, and the ratio of loss on induction side to the half-travel of slide.

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With the same data and position of crank at instant of release, find ratio of loss on eduction side to half-travel and position of crank at instant of compression.

10. The height of a wall supporting a bank of earth is 6 feet, the length is 21 feet, the specific gravity of the earth is 1·5, and the natural slope is 30°, the upper surface being horizontal; find the moment to overturn the wall.

Third Year's Engineering.

Applied Natural Philosophy.—*Examiner, Professor Curtis*, LL.D.

1. Determine the horse-power of a stationary engine, which draws a weight of 150 tons along a horizontal road, at the rate of 30 miles per hour, friction being 8 lbs. per ton.

2. Deduce the expression for the work capable of being done by a bar of metal of given length in being cooled through a given range of temperature—viz., $U = \frac{K.E.L.\ (a\ t)^2}{2}$.

3. If the action of an endless screw is reciprocal, show that the pitch of the screw must be greater than the angle of friction, and less than its complement.

4. Determine the equation of equilibrium in the wheel and axle, taking into account the rigidity of the rope and the friction of the axis.

5. Define the expression *line of resistance*, and explain how it enables us to distinguish between stability and instability.

6. Determine the expression for the sliding motion of one tooth on another in wheel-work; also for the ratio of the angular velocities of the wheels.

7. Prove that involute teeth are reducible to the class of roulette teeth.

8. A vertical wall sustains a surcharge of earth, the highest portion of the earth being horizontal, and the rest of the free surface inclined at the natural slope; determine the resistance which the wall must be capable of exerting.

9. Give a geometrical solution of the case in which the free surface of the earth consists of two parts, one inclined to the horizon at the angle of the natural slope, and the other at a less angle.

10. Explain the principle of Kater's reversible pendulum.

Zoology.—*Examiner, Professor Melville*, M.D.

1. Give the dentition in the horse, hare, cat, bear.
2. Describe the brain in fishes.
3. Describe the digestive system in birds.
4. Give the characteristics of the marsupiata, also the classification and distribution.
5. Give the characteristics of the reptilia; state the order and their characters.

Botany.

1. Define the terms bracteola, rhizoma, stamenodium, raphe, anther.
2. Give the different modes of cell-multiplication.

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Appendix, No. 2.

Sessional Examinations.

3. Describe the phenomena of development of the embryo in angiospermata.

4. Describe the structure of the flower in the genera :—rosa, potentilla, caltha, geranium.

5. State the characters of the natural orders, umbelliferæ and gramineæ.

Faculty of Law.

Jurisprudence.—*Examiner, Professor Lupton*, M.A.

1. What was the ancient, and what is the modern meaning of "imperfect" laws? Are such laws included within the province of jurisprudence?

2. Define law properly so called, and point out the different meanings of the word in the following connexions—Property Law, Criminal Law, Natural Law, Constitutional Law, Customary Law, International Law, National Law.

3. What are the characteristics of a monarchy, a system of confederated states, and a supreme federal government?

4. Explain and illustrate the manner in which the *jus gentium*, the *responsa prudentum*, and the *edicta prætorum* respectively contributed to complete the system of Roman law; and point out the English analogues of the above agencies.

5. "The family, then, is the type of an archaic society in all the modifications which it is capable of assuming; but the family here spoken of is not exactly the family as understood by a modern." Explain the difference between the ancient and modern conceptions of a family here alluded to.

6. Sketch the development of the Roman law of testaments, and account for the successive limitations on the right of testation.

7. Describe the three different forms of Village Communities mentioned by Mr. Maine, and show how they illustrate the development of proprietary rights.

8. Upon what grounds have nations laid claim to the possession of newly-discovered countries? Show the connexion with ideas derived from Roman law.

9. Briefly trace the steps by which the mature conception of a contract was evolved in Roman jurisprudence.

10. "The primitive history of criminal law divides itself into four stages." What are they?

11. Define *persona*, and distinguish between the two meanings which it implies. Give examples of the different kinds of fictitious persons.

12. "Though the history of ownership in England is not nearly completed, it is visibly the law of personalty which threatens to absorb and annihilate the law of realty." State and illustrate the general principle of which Mr. Maine gives the above as an example.

Civil Law.—*Examiner, Professor Lupton*, M.A.

1. Point out the restrictions in Roman law on marriage between relations in the direct and collateral lines, and between persons related by affinity.

2. What were the principal rules by which to determine the *status* of children born of parents of unequal *status*?

3. "The pupil might make his position better not worse." Explain

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this, and say what remedies the pupil had for the recovery of property alienated by him.

4. Mention the three prevailing theories as to the difference between *possessio civilis* and *possessio naturalis*.

Distinguish between *jus possessionis* and *jus possidendi*, and between the *rei vindicatio* and the *Publiciana in rem actio*.

A acquires a slave by tradition, the slave escapes, and is afterwards found in the possession of B. Could A recover the slave, or the value of the slave, and by what means?

5. Mention the principal modes in which the older Roman law as to testaments was modified by the prætorian jurisdiction.

6. Explain the *jus accrescendi*, and show how it was modified by the *leges caducariæ*, and by reciprocal substitutions.

7. What was the *Querela inofficiosi testamenti*, and by whom might it be preferred? In what respects did it differ from the *Querela nullitatis*, and what alteration did Justinian make in the law relating to it?

8. What, and for what reasons, was the effect of each of the following bequests:—

(*a.*) A slave with his peculium, the slave dying before the *aditio hereditatis*;

(*b.*) Of whichever of the testator's slaves the legatee may choose, the legatee dying before making choice;

(*c.*) A watch which the testator, after making his will, gives in pledge to a third party;

(*d.*) Of a slave's peculium which becomes doubled in value in the interval between the testator's death and the *aditio hereditatis*?

9. What were the principal provisions of the *Lex Falcidia* the *Sc. Trebellianum* and the *Sc. Pegasianum*.

10. Explain the *possessiones bonorum*, known in cases of intestacy as—*unde liberi, unde legitimi, unde cognati, unde vir et uxor*.

POLITICAL ECONOMY.—*Examiner, Professor Lupton*, M.A.

1. Distinguish between *value in use* and *exchange value*, and point out what elements are necessary to constitute *wealth*.

2. Define political economy, and enumerate what Mr. Senior calls the fundamental propositions of the science.

3. Distinguish between wealth and capital, and between fixed and circulating capital.

4. What are the advantages accruing from the division of labour?

5. "The tendency of population is to outrun production." Explain this dictum.

6. "If the produce of the land could always be increased in proportion to the outlay on it, there would be no such thing as rent." Explain and illustrate.

7. Distinguish between *profit* and *rate of profit*, between *wages* and *cost of labour*, and point out how the rate of profit depends on the cost of labour.

8. Explain exactly what is meant by *cost of production*.

9. Point out in what cases and in what manner, *demand and supply* and *cost of production* respectively influence values.

10. Point out the relations between the *value of money*, the *quantity of money*, and *general prices*.

11. "A protection tariff causes both labour and capital to be wasted." Explain this statement.

12. Explain what is meant by the exchange being against England.

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Appendix, No. 2.

Sessional Examinations.

GEOLOGY.—*Examiner, Professor Wm. King,* D.SC.

(*Arts.*)

1. Describe a graptolite.
2. Describe an ammonite, and state the order of the animal kingdom to which it belongs.
3. Describe granite, and give your view of its origin.
4. Describe calcite, galena, and quartz.
5. Under what conditions is it considered that Metamorphic rocks have assumed their present character?
6. Describe the origin of coal?
7. Describe the different movements which have acted on the earth's crust, and state their effect on rock-masses.

(*Engineering.*)

1. Describe the geological principle of the Artesian well.
2. Give a geological description of a coal mine.
3. Describe the crystalline systems.
4. Describe porphyry, and state your view of its origin.
5. Describe pyrites, felspar, and mica.
6. Name some Metamorphic rocks, and state your view of their origin.
7. Describe slate rocks, and give your view of their origin.

FACULTY OF MEDICINE.—FIRST YEAR.

EXPERIMENTAL PHYSICS.—*Examiner, Professor Curtis,* LL.D.

1. Three forces, 7 lbs., 7 lbs., and 23 lbs., are applied at a point, the directions of the two first intersect at 90°, and the third acts in the line bisecting the external angle between the directions of the other two; find the magnitude of their resultant, and construct for its direction.
2. Resolve a force of 49 lbs. into two parallel components acting at distances from it, which are in the ratio 4 : 3—(*a*) if the components are co-directional—(*b*) if the components are in opposite directions.
3. Two heavy bodies are projected in the same vertical plane, each from a given point and with a given velocity; show by a construction their distance from each other at a given instant—(*a*) if they start together—(*b*) when one starts before the other by a given interval of time.
4. Enunciate the principle of Archimedes; give a proof of it by *a priori* reasoning, and describe two experiments, one of which establishes its truth for the case of water, while the other shows that it is applicable to air.
5. Describe the action of the syphon, and explain the conditions of its working.
6. Explain how the specific gravity of a piece of cork may be found.
7. If a stretched string, 30 inches long, be gently touched at the distance 12 inches from one extremity, and the shorter portion be set vibrating by a violin bow, compare the note elicited with that produced if the string be firmly clamped instead of being gently touched.
8. Explain what is meant by *latent heat* and by *specific heat*.
9. Distinguish between the processes by which an iron bar is heated, when one end is placed in a fire, and water is heated in a vessel placed on a fire.

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10. Describe the distribution of the magnetic fluids in a magnetized bar, and account for magnetic induction. *Append No. 2.*

11. Show that an analogous hypothesis accounts for electrical induction. Sessional Examinations.

12. Explain how a steel bar may be magnetized by means of a Voltaic current, and state the law which determines its polarity.

CHEMISTRY.—*Examiner, Professor Rowney,* PH.D.

1. Describe the method of determining the composition of water by weight.

2. How is cyanogen prepared? Give also its composition and properties.

3. State the general opinion as to the nature of ozone.

4. Describe the process for extracting zinc from its ores.

5. How is the red or amorphous phosphorus obtained?

6. What is meant by spectrum analysis, and state what views are entertained respecting the nature of Frauenhofer's lines in the solar spectrum.

7. What action takes place when fluoride of silicon comes in contact with water?

8. How is benzol obtained, and what is its composition?

9. What action takes place when hydrochloric acid gas is passed into an alcoholic solution of stearic acid?

10. Give a definition of the terms atoms, equivalents, and molecules.

11. How is aldehyde obtained? State its composition and properties.

12. What is meant by fermentation?

BOTANY.—*Examiner, Professor Melville,* M.D.

1. Define the terms:—corm, raceme, spathe, drupe, endosperm.

2. Describe the structure of the wood-bundle in dicotyledons.

3. Describe the structure of the flower in the genera:—anemone, fragaria, primula.

4. Flower:—Perianth superior, gamophyllous, irregular, monandrous, gynandrous; pistil syncarpous; seeds indefinite, minute, exalbuminous. Name the genus.

5. Describe the characters of the natural orders:—cruciferæ, compositæ, liliaceæ.

ZOOLOGY.

1. Describe the circulation in reptilia.

2. Describe the skeleton of the foot in birds, and the leading modifications.

3. Mention the orders of fishes, and their essential characteristics.

4. State the families of the chelonia, and give their principal characters.

5. Give the dentition in canis, lepus, felis, ursus, ovis.

PRACTICAL ANATOMY.—*Examiner, Professor Cleland,* M.D.

(Junior Class.)

1. Give a full description of the cuboid bone and its relations.

2. Describe that part of the femur along which the lineæ aspera extends, stating its form and consistence, and the places of attachment of the various muscles.

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Appendix, No. 2.

Sessional Examinations.

3. Describe the surfaces, ligaments, and movements of the sterno-clavicular articulation.

4. Describe the surfaces and ligaments by which the radius and ulna are kept in contact, and the movements of the one bone on the other.

5. Describe the pronator radii teres and flexor longus pollicis muscles.

6. Describe the external pterygoid and genio-hyo-glossus muscles and their actions.

7. Describe the inferior turbinated bone.

8. Describe the rectus abdominis muscle, the blood-vessels in its substance, its actions, and the constitution of its sheath.

(*Senior Class.*)

1. Describe the lateral masses of the ethmoid bone, pointing out the peculiarities distinctively human.

2. Describe the boundaries and contents of the digastric space.

3. Describe the cutaneous nerves of the gluteal region.

4. Describe the origin, course, and distribution of the internal mammary artery.

5. Describe the hamstring muscles and their actions.

6. Describe the palmar interossei muscles and their actions.

7. Describe the relations of the third part of the subclavian artery.

8. Describe the external and internal abdominal rings and the boundaries of the inguinal canal.

PHYSIOLOGY.—*Examiner, Professor Cleland,* M.D.

(*Junior Class.*)

1. Describe the microscopic and other characters of tendon.

2. Describe the microscopic and other characters of dentine.

3. Describe the various characters of saliva, and the importance to be imputed to each in digestion.

4. Describe the nature of the human kidney as compared with the varieties of kidney found in other mammals.

5. Describe and prove the respective uses of the elastic and muscular tissues in the coats of arteries.

6. Explain the nature of a reflex action and give two examples, mentioning the parts of the nervous system involved in each.

7. Describe the peculiarities of the epithelium cells of the small intestine and the part which these cells play in absorption.

8. Describe the changes effected in the blood while passing through the lungs.

(*Senior Class.*)

1. Describe the properties of nucleated corpuscles, the various structural elements found entering into their formation, and the importance of each element.

2. Describe the varieties in appearance and composition of nerve fibres.

3. State the nature of the waste which occurs from muscular action, and give evidence in favour of your statement.

4. Describe the structure and functions of the glands of the stomach; also the peculiarity in the blood-vessels of the alimentary canal by which the absorptive function is prevented from interfering with the secreting function.

5. Describe the nature and cause of the cardiac impulse and of the radial pulse.

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6. Describe the development of the mouth and palate.
7. Describe the actions of the chain of ossicles in the tympanum.
8. State the evidence of the place of decussation of the motor and sensory tracts respectively.

PRACTICE OF MEDICINE.—*Examiner, Professor Colohan,* M.D.

1. Give the symptoms of acute gastritis and duodenitis respectively.
2. Give an outline of Bright's disease of the kidneys.
3. State generally the symptoms of acute of the liver.
4. Give an outline of the principal symptoms of typhus fever.
5. Mention the general conditions, and the period of typhus fever at which you would be induced to administer stimulants.

SURGERY.—*Examiner, Professor Browne,* M.D.

1. What are the secondary terminations of inflammation? How does the tissue which is the seat of the inflammation influence its termination?
2. If inflammation terminate in abcess, how would you diagnose it? How would the seat of that abscess affect your treatment? What forms of inflammation necessarily terminate in the formation of pus?
3. In what respect does inflammation in bone differ from inflammation of synovial membrane, where a large joint, such as the knee, is the seat of it?
4. Where inflammation attacks serus membrane, how may it terminate? What would be the treatment in each termination?
5. In lacerated wound of the thigh by machinery, by which the lower portion of the limb is carried away, in what state would you expect to find the different structures which have been torn through? How and when may hemorrhage set in? What would your treatment be in such a case?
6. How would you diagnose fracture of the neck of the thigh-bone from dislocation of the hip joint?

MIDWIFERY.—*Examiner, Professor Doherty,* M.D.

1. In what respect does the position of the ovum in the ovary of the bird tribe differ from that which it occupies in the ovary of the human species?
2. Describe the process of segmentation as it takes place in the batrachia.
3. Describe the contents of the gravid human uterus at the third month, proceeding from without inwards, and the sources from which each envelope of the embryo is evolved.
4. What is considered the duration of human pregnancy? Why is it that so much difficulty exists in defining it accurately?
5. What are the causes, dangers, and difficulties of treatment in cases of abortion and premature labour?
6. What is the best classification of convulsions connected with gestation? Give the distinguishing characteristics of each kind and the appropriate treatment?

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Appendix, No. 2.

Sessional Examinations.

MEDICAL JURISPRUDENCE.—*Examiner, Joseph P. Pye,* M.D.

1. The dead body of an infant is found. Describe the proceedings you would adopt to obtain evidence to guide you in forming an opinion on the following points:—

(1.) Was the child born alive?

(2.) If born alive, how long did it survive its birth?

State exactly what the hydrostatic lung test is expected to prove; explain how the value of the test has been improved by the introduction of pressure in the method of applying it, and mention the valid objections that may still be offered to it.

2. How would you proceed to identify a suspected blood stain on an article of iron or steel? Describe Virchow's method of obtaining hæmin crystals from a blood stain, and the appearance of the crystals under the microscope.

3. What natural appearance occurring after death might be mistaken for the mark of a bruise inflicted during life? How are the two conditions to be distinguished, and in what cases is the appearance referred to very faint or entirely absent?

4. A dead body is found in the water. What appearances would make it probable that death was caused by drowning?

5. Describe the appearance under the microscope of the crystals of arsenious acid, as seen by transmitted and by reflected light. How are they best obtained?

6. What symptoms are caused by a poisonous dose of phosphorus? Describe the process recommended by Mitscherlich for the detection of the poison in organic mixtures.

7. What is the composition of the aceto-arsenite of copper, and for what purposes is it used? Give the symptoms of the chronic form of poisoning by it.

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